

Best Local Similarity 100.0%; Pred. No. 3e-06; Mismatches 0; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TSYVKVLHVMVKISG 15  
| | | | | | | | | | | | | | | |  
1 TSYVKVLHVMVKISG 15

Db 1 TSYVKVLHVMVKISG 15  
| | | | | | | | | | | | | | | |  
1 TSYVKVLHVMVKISG 15

RESULT 2

AAB31319 standard; peptide; 15 AA.

XX AAB31319;

XX AC

XX DT 20-APR-2001 (first entry)

XX DE Exemplary antigen characteristic of tumours and derived from MAGE-A3.

XX KW MAGE-A1; HLA; human leukocyte antigen; CD4+ T lymphocyte; cancer;

XX KW MAGE-A1 HLA class II-binding protein; vaccine.

XX OS Homo sapiens.

XX PN WO200078806-A1.

XX PD 28-DEC-2000.

XX PF 14-JUN-2000; 2000WO-US016287.

XX PR 18-JUN-1999; 99US-00336091.

XX PA (LUDW-) LUDWIG INST CANCER RES.

XX PI Van Snick J, Lethe B, Chaux P, Boon-Palleur T, Van Der Bruggen P;

XX DR WPI; 2001-102698/11.

XX PT Novel MAGE-A1 human leukocyte antigen class II peptides which bind to and

XX PT are presented to the class II molecules, useful for inducing immune

XX PT response and treating cancers characterized by expression of MAGE-A1.

XX PS Disclosure; Page 32; 78pp; English.

XX CC AAB31302-59 represent exemplary antigens which are characteristic of

XX CC tumours. They can be used to enhance the immune response of vaccines

XX CC comprising peptides derived from human MAGE-A1 HLA (human leukocyte

XX CC antigen) class II-binding protein. Peptides derived from the MAGE-A1 HLA

XX CC binding protein stimulate the activity and proliferation of CD4+ T

XX CC lymphocytes. The MAGE-A1 HLA binding protein is useful as a diagnostic

XX CC agent for diagnosing a disorder characterized by expression of MAGE-A1.

XX CC The protein is used for treating a disorder characterized by expression

XX CC of MAGE-A1 such as cancers e.g. melanoma, squamous cell carcinomas,

XX CC colorectal carcinomas, osteosarcomas, and lymphocytic leukemias. Peptides

XX CC derived from the MAGE-A1 HLA binding protein are useful in the production

XX CC of anti-tumour vaccines

XX SQ Sequence 15 AA;

Query Match 100.0%; Score 77; DB 4; Length 15;

Best Local Similarity 100.0%; Pred. No. 3e-06;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TSYVKVLHVMVKISG 15  
| | | | | | | | | | | | | | | |  
1 TSYVKVLHVMVKISG 15

Db 1 TSYVKVLHVMVKISG 15  
| | | | | | | | | | | | | | | |  
1 TSYVKVLHVMVKISG 15

RESULT 3

ABG79126 standard; peptide; 15 AA.

XX ABG79126;

XX AC

XX XX

DT 15-NOV-2002 (first entry)

XX Human Mage-3 class II HLA tumour-restricted antigen peptide #1.

XX DE

XX KW Cell penetrating peptide; cancer; tumour; melanoma; thymoma; antigen;

XX KW lymphoma; sarcoma; lung cancer; non-Hodgkin's lymphoma; leukaemia;

XX KW Hodgkin's lymphoma; uterine cancer; cervical cancer; bladder cancer;

XX KW kidney cancer; adenocarcinoma; breast cancer; prostate cancer;

XX KW ovarian cancer; pancreatic cancer; epitope; vaccine; dendritic cell;

XX KW tumour infiltrating lymphocyte; TIL; human leukocyte antigen; HLA;

XX KW cytostatic; human.

XX OS Homo sapiens.

XX PN WO200264057-A2.

XX PD 22-AUG-2002.

XX PF 15-FEB-2002; 2002WO-US005212.

XX PR 15-FEB-2001; 2001US-0268687P.

XX PA (BAYU ) BAYLOR COLLEGE MEDICINE.

XX PI Wang R;

XX DR WPI; 2002-627577/67.

XX PT Novel composition for treating a disease in an animal, comprises an

XX PT immune effector cell and cell penetrating peptide associated with an

XX PT antigen or antibody.

XX PS Disclosure; Page 21; 61pp; English.

XX CC The invention relates to a composition (I) comprising an immune effector

XX CC cell and a cell penetrating peptide (CPP) associated with an antigen or

XX CC antibody. Also included are (1) a vaccine comprising (I), CPP associated

XX CC with an antigen, and a pharmaceutically acceptable carrier and (2)

XX CC preparing a composition for a disease, by providing (I) and CPP

XX CC associated with an antigen for a disease, and introducing the antigen-

XX CC associated CPP to (I), where antigen enters into the cell. The antigens

XX CC are, for example, tumour antigen derived epitopes recognised by tumour

XX CC infiltrating lymphocytes (TIL) of HLA (human leukocyte antigen) class I

XX CC or II. The composition is useful for enhancing immunity in an animal to a

XX CC disease, by administering a mature dendritic cell comprising CPP

XX CC associated with an antigen to disease, to the animal, such that following

XX CC the administration, animal is protected from disease, where the animal

XX CC comprises both CD4+ and CD8+ T cells. It is also useful for treating a

XX CC disease (e.g. cancer, tumour, melanoma, thymoma, lymphoma, sarcoma, lung

XX CC cancer, non-Hodgkin's lymphoma, leukaemia, Hodgkin's lymphoma, uterine

XX CC cancer, cervical cancer, bladder cancer, kidney cancer, adenocarcinoma,

XX CC breast cancer, prostate cancer, ovarian cancer and pancreatic cancer).

XX CC The animal is further subjected to a cancer treatment including surgery,

XX CC radiation, chemotherapy or gene therapy. The administration of (I),

XX CC preferably dendritic cell is prior to, subsequent to or concurrent with,

XX CC the cancer treatment. The present sequence is a tumour antigen derived

XX CC epitope for inclusion in the composition of the invention

XX SQ Sequence 15 AA;

Query Match 100.0%; Score 77; DB 5; Length 15;

Best Local Similarity 100.0%; Pred. No. 3e-06;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TSYVKVLHVMVKISG 15  
| | | | | | | | | | | | | | | |  
1 TSYVKVLHVMVKISG 15

Db 1 TSYVKVLHVMVKISG 15  
| | | | | | | | | | | | | | | |  
1 TSYVKVLHVMVKISG 15

RESULT 4

AAG84641 standard; peptide; 15 AA.

XX AAG84641

XX ID

XX AC

XX XX

Best Local Similarity 100.0%; Pred. No. 1.1e-07;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VFQIEMVEDPIGHL 15  
| | | | | | | | | | | | | | | |  
Db 1 VFQIEMVEDPIGHL 15

RESULT 2  
AAG84635  
ID AAG84635 standard; peptide; 15 AA.  
XX AAG84635;  
DT 10-SEP-2001 (first entry)  
XX MAGE3 DR supermotif binding peptide #46.  
XX Human; human leukocyte antigen; HLA epitope; cytotoxic T lymphocyte; CTL;  
XX MAGE2; MAGE3; melanoma antigen gene; immune response; vaccine; cancer;  
XX cytostatic; immunostimulant.  
XX Homo sapiens.  
OS Synthetic.  
XX WO200142267-A1.  
PN 14-JUN-2001.  
XX 11-DEC-2000; 2000WO-US033545.  
XX 10-DEC-1999; 99US-00458298.  
XX (EPIM-) EPIMUNE INC.  
XX Fikes J, Sette A, Sidney J, Southwood S, Chesnut R, Celis E;  
XX Keogh E;  
XX WPI; 2001-375002/39.  
XX An isolated prepared MAGE2/3 epitope (I) for use in pharmaceuticals for  
XX the treatment and prevention of cancer.  
XX Disclosure; Page 138; 171pp; English.  
XX The present invention describes MAGE2/3 epitopes (I). Also described are:  
XX (1) a clonal cytotoxic T lymphocyte (CTL) that is cultured in vivo and  
XX binds to a complex of (I); (2) a peptide (II) comprising (I) and a second  
XX epitope and has less than 50 contiguous amino acids; (3) a vaccine  
XX composition comprising (II), a unit dose of a peptide with at least 50  
XX contiguous amino acids with 100% identity to the native peptide sequence  
XX of MAGE2/3, and a pharmaceutical excipient; (4) an isolated nucleic acid  
XX encoding (I); and (5) an isolated nucleic acid encoding (II). (I) has  
XX cytostatic activity, and can be used in vaccines and as an  
XX immunostimulant. A vaccine of (3) is useful for the treatment and  
XX prevention of cancer. (I) is useful for monitoring or evaluating an  
XX immune response by incubating a T-lymphocyte sample from a patient with  
XX (I) that binds to an human leukocyte antigen (HLA) allele present in the  
XX patient and detecting the presence of the T-lymphocyte that binds to the  
XX peptide. The vaccine allows the opportunity to combine epitopes derived  
XX from multiple tumour-associated molecules reducing the likelihood of  
XX tumour escape due to antigen loss. AAG84515 to AAG84909 and AAB9725  
XX represent amino acid sequences used in the exemplification of the present  
XX invention  
SQ Sequence 15 AA;

Query Match 100.0%; Score 78; DB 4; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.1e-07;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VFQIEMVEDPIGHL 15  
| | | | | | | | | | | | | | | |

Db 1 VFQIEMVEDPIGHL 15

RESULT 3  
AAG84605  
ID AAG84605 standard; peptide; 15 AA.  
XX AAG84605;  
DT 10-SEP-2001 (first entry)  
XX MAGE3 DR supermotif binding peptide #16.  
XX Human; human leukocyte antigen; HLA epitope; cytotoxic T lymphocyte; CTL;  
XX MAGE2; MAGE3; melanoma antigen gene; immune response; vaccine; cancer;  
XX cytostatic; immunostimulant.  
XX Homo sapiens.  
OS Synthetic.  
XX WO200142267-A1.  
PN 14-JUN-2001.  
XX 11-DEC-2000; 2000WO-US033545.  
XX 10-DEC-1999; 99US-00458298.  
XX (EPIM-) EPIMUNE INC.  
XX Fikes J, Sette A, Sidney J, Southwood S, Chesnut R, Celis E;  
XX Keogh E;  
XX WPI; 2001-375002/39.  
XX An isolated prepared MAGE2/3 epitope (I) for use in pharmaceuticals for  
XX the treatment and prevention of cancer.  
XX Disclosure; Page 138; 171pp; English.  
XX The present invention describes MAGE2/3 epitopes (I). Also described are:  
XX (1) a clonal cytotoxic T lymphocyte (CTL) that is cultured in vivo and  
XX binds to a complex of (I); (2) a peptide (II) comprising (I) and a second  
XX epitope and has less than 50 contiguous amino acids; (3) a vaccine  
XX composition comprising (II), a unit dose of a peptide with at least 50  
XX contiguous amino acids with 100% identity to the native peptide sequence  
XX of MAGE2/3, and a pharmaceutical excipient; (4) an isolated nucleic acid  
XX encoding (I); and (5) an isolated nucleic acid encoding (II). (I) has  
XX cytostatic activity, and can be used in vaccines and as an  
XX immunostimulant. A vaccine of (3) is useful for the treatment and  
XX prevention of cancer. (I) is useful for monitoring or evaluating an  
XX immune response by incubating a T-lymphocyte sample from a patient with  
XX (I) that binds to an human leukocyte antigen (HLA) allele present in the  
XX patient and detecting the presence of the T-lymphocyte that binds to the  
XX peptide. The vaccine allows the opportunity to combine epitopes derived  
XX from multiple tumour-associated molecules reducing the likelihood of  
XX tumour escape due to antigen loss. AAG84515 to AAG84909 and AAB9725  
XX represent amino acid sequences used in the exemplification of the present  
XX invention  
SQ Sequence 15 AA;

Query Match 87.2%; Score 68; DB 4; Length 15;  
Best Local Similarity 100.0%; Pred. No. 8.4e-06;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GIELMEVDPIGHL 15  
| | | | | | | | | | | | | | | |  
Db 1 GIELMEVDPIGHL 13

RESULT 4  
AAG84657

Best Local Similarity 100.0%; Pred. No. 3.5e-06; Mismatches 0; Indels 0; Gaps 0;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFPVIFSKASSSLQ 15  
| | | | | | | | | | | | | | | | |  
DB 1 FFPVIFSKASSSLQ 15  
| | | | | | | | | | | | | | | | |

RESULT 2  
AAG84601  
ID AAG84601 standard; peptide; 15 AA.  
AC AAG84601;  
XX  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE MAGE3 DR supermotif binding peptide #12.  
XX  
XX Human; human leukocyte antigen; HLA epitope; cytotoxic T lymphocyte; CTL;  
KW MAGE2; MAGE3; melanoma antigen gene; immune response; vaccine; cancer;  
KW cytostatic; immunostimulant.  
XX  
XX Homo sapiens.  
OS Synthetic.  
OS  
XX WO200142267-A1.  
XX  
XX 14-JUN-2001.  
XX  
XX 11-DEC-2000; 2000WO-US033545.  
XX  
XX 10-DEC-1999; 99US-00458298.  
XX  
XX (EPIM-) EPIMUNE INC.  
XX  
XX Fikes J, Sette A, Sidney J, Southwood S, Chesnut R, Celis E;  
PI Keogh E;  
XX  
XX WPI; 2001-375002/39.  
XX  
XX An isolated prepared MAGE2/3 epitope (I) for use in pharmaceuticals for  
PT the treatment and prevention of cancer.  
XX  
XX Disclosure; Page 138; 171pp; English.

The present invention describes MAGE2/3 epitopes (I). Also described are:  
CC (1) a clonal cytotoxic T lymphocyte (CTL) that is cultured in vivo and  
CC binds to a complex of (I); (2) a peptide (II) comprising (I) and a second  
CC epitope and has less than 50 contiguous amino acids; (3) a vaccine  
CC composition comprising (II), a unit dose of a peptide with at least 50  
CC contiguous amino acids with 100% identity to the native peptide sequence  
CC of MAGE2/3, and a pharmaceutical excipient; (4) an isolated nucleic acid  
CC encoding (I); and (5) an isolated nucleic acid encoding (II). (I) has  
CC cytostatic activity, and can be used in vaccines and as an  
CC immunostimulant. A vaccine of (3) is useful for the treatment and  
CC prevention of cancer. (I) is useful for monitoring or evaluating an  
CC immune response by incubating a T-lymphocyte sample from a patient with  
CC (I) that binds to an human leukocyte antigen (HLA) allele present in the  
CC patient and detecting the presence of the T-lymphocyte that binds to the  
CC peptide. The vaccine allows the opportunity to combine epitopes derived  
CC from multiple tumour-associated molecules reducing the likelihood of  
CC tumour escape due to antigen loss. AAG84515 to AAG84909 and AAB99725  
CC represent amino acid sequences used in the exemplification of the present  
XX invention  
XX Sequence 15 AA;  
SQ

Query Match 100.0%; Score 71; DB 4; Length 15;  
Best Local Similarity 100.0%; Pred. No. 3.5e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFPVIFSKASSSLQ 15  
| | | | | | | | | | | | | | | | |

DB 1 FFPVIFSKASSSLQ 15  
| | | | | | | | | | | | | | | | |

RESULT 3  
AAG84602  
ID AAG84602 standard; peptide; 15 AA.  
XX  
XX AAG84602;  
AC  
XX  
XX 10-SEP-2001 (first entry)  
DT  
XX  
XX MAGE3 DR supermotif binding peptide #13.  
DE  
XX  
XX Human; human leukocyte antigen; HLA epitope; cytotoxic T lymphocyte; CTL;  
KW MAGE2; MAGE3; melanoma antigen gene; immune response; vaccine; cancer;  
KW cytostatic; immunostimulant.  
XX  
XX Homo sapiens.  
OS Synthetic.  
OS  
XX WO200142267-A1.  
XX  
XX 14-JUN-2001.  
XX  
XX 11-DEC-2000; 2000WO-US033545.  
XX  
XX 10-DEC-1999; 99US-00458298.  
XX  
XX (EPIM-) EPIMUNE INC.  
XX  
XX Fikes J, Sette A, Sidney J, Southwood S, Chesnut R, Celis E;  
PI Keogh E;  
XX  
XX WPI; 2001-375002/39.  
XX  
XX An isolated prepared MAGE2/3 epitope (I) for use in pharmaceuticals for  
PT the treatment and prevention of cancer.  
XX  
XX Disclosure; Page 138; 171pp; English.

The present invention describes MAGE2/3 epitopes (I). Also described are:  
CC (1) a clonal cytotoxic T lymphocyte (CTL) that is cultured in vivo and  
CC binds to a complex of (I); (2) a peptide (II) comprising (I) and a second  
CC epitope and has less than 50 contiguous amino acids; (3) a vaccine  
CC composition comprising (II), a unit dose of a peptide with at least 50  
CC contiguous amino acids with 100% identity to the native peptide sequence  
CC of MAGE2/3, and a pharmaceutical excipient; (4) an isolated nucleic acid  
CC encoding (I); and (5) an isolated nucleic acid encoding (II). (I) has  
CC cytostatic activity, and can be used in vaccines and as an  
CC immunostimulant. A vaccine of (3) is useful for the treatment and  
CC prevention of cancer. (I) is useful for monitoring or evaluating an  
CC immune response by incubating a T-lymphocyte sample from a patient with  
CC (I) that binds to an human leukocyte antigen (HLA) allele present in the  
CC patient and detecting the presence of the T-lymphocyte that binds to the  
CC peptide. The vaccine allows the opportunity to combine epitopes derived  
CC from multiple tumour-associated molecules reducing the likelihood of  
CC tumour escape due to antigen loss. AAG84515 to AAG84909 and AAB99725  
CC represent amino acid sequences used in the exemplification of the present  
XX invention  
XX Sequence 15 AA;  
SQ

Query Match 91.5%; Score 65; DB 4; Length 15;  
Best Local Similarity 100.0%; Pred. No. 4.6e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 FFPVIFSKASSSLQ 15  
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DB 1 FFPVIFSKASSSLQ 14  
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RESULT 4  
AAG84629

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: August 17, 2004, 17:48:04 ; Search time 35.6667 Seconds  
(without alignments)  
132.025 Million cell updates/sec

Title: US-09-914-239-6  
Perfect score: 78  
Sequence: 1 VFGIELMEVDPIGHL 15

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1292805 seqs, 313927144 residues

Total number of hits satisfying chosen parameters: 214407

Minimum DB seq length: 0  
Maximum DB seq length: 15

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published Applications AA:  
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Pred. No. is the number of results predicted by chance to have a  
score Greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	78	100.0	15	12	US-10-149-135-2012
2	68	87.2	15	12	US-10-149-135-1982
3	66	84.6	15	12	US-10-149-135-2005
4	66	84.6	15	12	US-10-149-135-2034
5	66	84.6	15	12	US-10-149-135-2424
6	62	79.5	15	12	US-10-149-135-1987
7	62	79.5	15	12	US-10-149-135-2032
8	62	79.5	15	12	US-10-149-135-2425
9	62	79.5	15	12	US-10-149-135-2435
10	60	76.9	15	12	US-10-149-135-1997
11	60	76.9	15	12	US-10-149-135-2394
12	60	76.9	15	12	US-10-149-135-2408
13	58	74.4	11	12	US-10-149-135-307
14	58	74.4	11	12	US-10-149-135-667
15	56	71.8	15	12	US-10-149-135-1959

ALIGNMENTS

RESULT 1

US-10-149-135-2012  
; Sequence 2012, Application US/10149135  
; Publication No. US20040053822A1  
; GENERAL INFORMATION:  
; APPLICANT: Fikes, John  
; APPLICANT: Sette, Alessandro  
; APPLICANT: Sidney, John  
; APPLICANT: Southwood, Scott  
; APPLICANT: Chesnut, Robert  
; APPLICANT: Celis, Esteban  
; APPLICANT: Keogh, Elissa  
; TITLE OF INVENTION: Inducing Cellular Immune Responses to  
; FILE REFERENCE: 2060.0130001  
; CURRENT APPLICATION NUMBER: US/10/149,135  
; PRIOR FILING DATE: 2000-12-11  
; PRIOR APPLICATION NUMBER: PCT/US00/33545  
; PRIOR FILING DATE: 2000-12-11  
; PRIOR APPLICATION NUMBER: US 09/458,298  
; PRIOR FILING DATE: 1999-12-10  
; PRIOR APPLICATION NUMBER: US 09/189,702  
; PRIOR FILING DATE: 1998-11-10  
; PRIOR APPLICATION NUMBER: US 08/205,713  
; PRIOR FILING DATE: 1994-03-04  
; PRIOR APPLICATION NUMBER: US 08/159,184  
; PRIOR FILING DATE: 1993-11-29  
; PRIOR APPLICATION NUMBER: US 08/073,205  
; PRIOR FILING DATE: 1993-06-04  
; PRIOR APPLICATION NUMBER: US 08/027,146  
; PRIOR FILING DATE: 1993-03-05  
; NUMBER OF SEQ ID NOS: 2479  
; SOFTWARE: Patent in version 3.1  
; SEQ ID NO 2012  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:

Sequence 1518, Ap  
Sequence 1779, Ap  
Sequence 382, App  
Sequence 720, App  
Sequence 1901, Ap  
Sequence 58, Appl  
Sequence 721, Appl  
Sequence 1236, Ap  
Sequence 1309, Ap  
Sequence 1594, Ap  
Sequence 1823, Ap  
Sequence 2224, Ap  
Sequence 327, App  
Sequence 682, App  
Sequence 1209, Ap  
Sequence 1593, Ap  
Sequence 1822, Ap  
Sequence 2118, Ap  
Sequence 2163, Ap  
Sequence 8, Appl  
Sequence 20, Appl  
Sequence 59, Appl  
Sequence 15, Appl  
Sequence 5, Appl  
Sequence 49, Appl  
Sequence 47, Appl  
Sequence 1926, Ap  
Sequence 2381, Ap

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38 49 62.8 10 9 US-09-766-889A-59  
39 49 62.8 10 12 US-10-218-095-15  
40 49 62.8 10 14 US-10-181-097-5  
41 49 62.8 10 14 US-10-170-832-49  
42 49 62.8 10 16 US-10-447-161-25  
43 49 62.8 10 16 US-10-415-841A-47  
44 46 59.0 15 12 US-10-149-135-1926  
45 46 59.0 15 12 US-10-149-135-2381

OTHER INFORMATION: Artificial Peptide

US-10-149-135-2012

Query Match 100.0%; Score 78; DB 12; Length 15;

Best Local Similarity 100.0%; Pred. No. S.6e-07;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VFGIELMEVDPIGHL 15

DB 1 VFGIELMEVDPIGHL 15

RESULT 2

US-10-149-135-1982

Sequence 1982, Application US/10149135

Publication No. US20040053822A1

GENERAL INFORMATION:

APPLICANT: Fikes, John

APPLICANT: Sette, Alessandro

APPLICANT: Sidney, John

APPLICANT: Southwood, Scott

APPLICANT: Chesnut, Robert

APPLICANT: Celis, Esteban

APPLICANT: Keogh, Elissa

TITLE OF INVENTION: Inducing Cellular Immune Responses to

FILE OF INVENTION: MAG22/3 Using Peptide and Nucleic Acid Compositions

FILE REFERENCE: 2060.0130001

CURRENT APPLICATION NUMBER: US/10/149,135

CURRENT FILING DATE: 2000-12-11

PRIOR APPLICATION NUMBER: PCT/US00/33545

PRIOR FILING DATE: 2000-12-11

PRIOR APPLICATION NUMBER: US 09/458,298

PRIOR FILING DATE: 1999-12-10

PRIOR APPLICATION NUMBER: US 09/189,702

PRIOR FILING DATE: 1998-11-10

PRIOR APPLICATION NUMBER: US 08/205,713

PRIOR FILING DATE: 1994-03-04

PRIOR APPLICATION NUMBER: US 08/159,184

PRIOR FILING DATE: 1993-11-29

PRIOR APPLICATION NUMBER: US 08/073,205

PRIOR FILING DATE: 1993-06-04

PRIOR APPLICATION NUMBER: US 08/027,146

PRIOR FILING DATE: 1993-03-05

NUMBER OF SEQ ID NOS: 2479

SOFTWARE: PatentIn version 3.1

SEQ ID NO 1982

LENGTH: 15

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Artificial Peptide

US-10-149-135-1982

Query Match

Best Local Similarity 87.2%; Score 68; DB 12; Length 15;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GIELMEVDPIGHL 15

DB 1 GIELMEVDPIGHL 13

RESULT 3

US-10-149-135-2005

Sequence 2005, Application US/10149135

Publication No. US20040053822A1

GENERAL INFORMATION:

APPLICANT: Fikes, John

APPLICANT: Sette, Alessandro

APPLICANT: Sidney, John

APPLICANT: Southwood, Scott

APPLICANT: Chesnut, Robert

APPLICANT: Celis, Esteban

APPLICANT: Keogh, Elissa  
TITLE OF INVENTION: Inducing Cellular Immune Responses to  
FILE OF INVENTION: MAG22/3 Using Peptide and Nucleic Acid Compositions  
FILE REFERENCE: 2060.0130001  
CURRENT APPLICATION NUMBER: US/10/149,135  
CURRENT FILING DATE: 2000-12-11  
PRIOR APPLICATION NUMBER: PCT/US00/33545  
PRIOR FILING DATE: 2000-12-11  
PRIOR APPLICATION NUMBER: US 09/458,298  
PRIOR FILING DATE: 1999-12-10  
PRIOR APPLICATION NUMBER: US 09/189,702  
PRIOR FILING DATE: 1998-11-10  
PRIOR APPLICATION NUMBER: US 08/205,713  
PRIOR FILING DATE: 1994-03-04  
PRIOR APPLICATION NUMBER: US 08/159,184  
PRIOR FILING DATE: 1993-11-29  
PRIOR APPLICATION NUMBER: US 08/073,205  
PRIOR FILING DATE: 1993-06-04  
PRIOR APPLICATION NUMBER: US 08/027,146  
NUMBER OF SEQ ID NOS: 2479  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 2005  
LENGTH: 15  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Artificial Peptide  
US-10-149-135-2005

Query Match 84.6%; Score 66; DB 12; Length 15;

Best Local Similarity 100.0%; Pred. No. 7.7e-05;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VFGIELMEVDPIG 13

DB 3 VFGIELMEVDPIG 15

RESULT 4

US-10-149-135-2034

Sequence 2034, Application US/10149135

Publication No. US20040053822A1

GENERAL INFORMATION:

APPLICANT: Fikes, John

APPLICANT: Sette, Alessandro

APPLICANT: Sidney, John

APPLICANT: Southwood, Scott

APPLICANT: Chesnut, Robert

APPLICANT: Celis, Esteban

APPLICANT: Keogh, Elissa

TITLE OF INVENTION: Inducing Cellular Immune Responses to

FILE OF INVENTION: MAG22/3 Using Peptide and Nucleic Acid Compositions

FILE REFERENCE: 2060.0130001

CURRENT APPLICATION NUMBER: US/10/149,135

CURRENT FILING DATE: 2000-12-11

PRIOR APPLICATION NUMBER: PCT/US00/33545

PRIOR FILING DATE: 2000-12-11

PRIOR APPLICATION NUMBER: US 09/458,298

PRIOR FILING DATE: 1999-12-10

PRIOR APPLICATION NUMBER: US 09/189,702

PRIOR FILING DATE: 1998-11-10

PRIOR APPLICATION NUMBER: US 08/205,713

PRIOR FILING DATE: 1994-03-04

PRIOR APPLICATION NUMBER: US 08/159,184

PRIOR FILING DATE: 1993-11-29

PRIOR APPLICATION NUMBER: US 08/073,205

PRIOR FILING DATE: 1993-06-04

PRIOR APPLICATION NUMBER: US 08/027,146

PRIOR FILING DATE: 1993-03-05

NUMBER OF SEQ ID NOS: 2479

SOFTWARE: PatentIn version 3.1

SEQ ID NO 2034

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: August 17, 2004, 17:48:04 ; Search time 35.6667 Seconds  
(without alignments)  
132.025 Million cell updates/sec

Title: US-09-914-239-4

Perfect score: 71

Sequence: 1 PFPVIFSKASSSLQL 15

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1292805 seqs, 313927144 residues

Total number of hits satisfying chosen parameters: 214407

Minimum DB seq length: 0

Maximum DB seq length: 15

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:

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17: /cgn2\_6/prodata/1/pubpaa/US60\_NEW\_PUB.pep.\*  
18: /cgn2\_6/prodata/1/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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2	65	91.5	15	12	US-10-149-135-1979
3	62	87.3	15	12	US-10-149-135-2006
4	61	85.9	15	12	US-10-149-135-1923
5	59	83.1	15	12	US-10-149-135-2392
6	59	83.1	15	12	US-10-149-135-2393
7	59	83.1	15	12	US-10-149-135-2407
8	55	77.5	15	12	US-10-149-135-1924
9	54	76.1	15	12	US-10-149-135-2000
10	54	76.1	15	12	US-10-149-135-2392
11	54	76.1	15	12	US-10-149-135-2406
12	54	76.1	15	12	US-10-149-135-2434
13	52	73.2	15	12	US-10-149-135-1948
14	50	70.4	11	12	US-10-149-135-409
15	50	70.4	11	12	US-10-149-135-738

16	48	67.6	11	12	US-10-149-135-699	Sequence 699, App
17	48	67.6	11	12	US-10-149-135-1895	Sequence 1895, App
18	48	67.6	11	12	US-10-149-135-2256	Sequence 2256, App
19	46	64.8	9	12	US-10-149-135-1367	Sequence 1367, App
20	46	64.8	9	12	US-10-149-135-1534	Sequence 1534, App
21	46	64.8	10	12	US-10-149-135-1330	Sequence 1330, App
22	46	64.8	10	12	US-10-149-135-1662	Sequence 1662, App
23	46	64.8	11	12	US-10-149-135-1450	Sequence 1450, App
24	46	64.8	15	12	US-10-149-135-2013	Sequence 2013, App
25	44	62.0	9	12	US-10-149-135-2079	Sequence 2079, App
26	44	62.0	9	12	US-10-149-135-2137	Sequence 2137, App
27	44	62.0	10	12	US-10-149-135-1017	Sequence 1017, App
28	44	62.0	11	12	US-10-149-135-789	Sequence 789, App
29	44	62.0	11	12	US-10-149-135-1018	Sequence 1018, App
30	44	62.0	11	12	US-10-149-135-1096	Sequence 1096, App
31	43	60.6	10	12	US-10-149-135-446	Sequence 446, App
32	43	60.6	10	12	US-10-149-135-770	Sequence 770, App
33	42	59.2	8	12	US-10-149-135-1366	Sequence 1366, App
34	42	59.2	8	12	US-10-149-135-1533	Sequence 1533, App
35	42	59.2	8	12	US-10-149-135-1694	Sequence 1694, App
36	42	59.2	8	12	US-10-149-135-1790	Sequence 1790, App
37	42	59.2	9	12	US-10-149-135-1329	Sequence 1329, App
38	42	59.2	9	12	US-10-149-135-1661	Sequence 1661, App
39	42	59.2	9	12	US-10-149-135-1672	Sequence 1672, App
40	42	59.2	9	12	US-10-149-135-1857	Sequence 1857, App
41	42	59.2	9	12	US-10-149-135-2131	Sequence 2131, App
42	42	59.2	10	12	US-10-149-135-1449	Sequence 1449, App
43	42	59.2	10	12	US-10-149-135-1740	Sequence 1740, App
44	40	56.3	8	12	US-10-149-135-788	Sequence 788, App
45	40	56.3	8	12	US-10-149-135-829	Sequence 829, App

#### ALIGNMENTS

#### RESULT 1

US-10-149-135-1978  
; Sequence 1978, Application US/10149135  
; Publication No. US20040053822A1  
; GENERAL INFORMATION:  
; APPLICANT: Fikes, John  
; APPLICANT: Sette, Alessandro  
; APPLICANT: Sidney, John  
; APPLICANT: Southwood, Scott  
; APPLICANT: Chesnut, Robert  
; APPLICANT: Celis, Esteban  
; APPLICANT: Keogh, Elissa  
; TITLE OF INVENTION: Inducing Cellular Immune Responses to  
; FILE REFERENCE: 2060.0130001  
; CURRENT APPLICATION NUMBER: US/10/149,135  
; PRIOR FILING DATE: 2000-12-11  
; PRIOR APPLICATION NUMBER: PCT/US00/33545  
; PRIOR FILING DATE: 2000-12-11  
; PRIOR APPLICATION NUMBER: US 09/458,298  
; PRIOR FILING DATE: 1999-12-10  
; PRIOR APPLICATION NUMBER: US 09/189,702  
; PRIOR FILING DATE: 1998-11-10  
; PRIOR APPLICATION NUMBER: US 08/205,713  
; PRIOR FILING DATE: 1994-03-04  
; PRIOR APPLICATION NUMBER: US 08/159,184  
; PRIOR FILING DATE: 1993-11-29  
; PRIOR APPLICATION NUMBER: US 08/073,205  
; PRIOR FILING DATE: 1993-06-04  
; PRIOR APPLICATION NUMBER: US 08/027,146  
; PRIOR FILING DATE: 1993-03-05  
; NUMBER OF SEQ ID NOS: 2479  
; SOFTWARE: Patent in version 3.1  
; SEQ ID NO 1978  
; LENGTH: 15  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:

OTHER INFORMATION: Artificial Peptide

US-10-149-135-1978

Query Match 100.0%; Score 71; DB 12; Length 15;

Best Local Similarity 100.0%; Pred. No. 1.2e-05;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FFPVIFSKASSLQL 15

Db 1 FFPVIFSKASSLQL 15

#### RESULT 2

US-10-149-135-1979

Sequence 1979, Application US/10149135

Publication No. US20040053822A1

GENERAL INFORMATION:

APPLICANT: Fikes, John

APPLICANT: Sette, Alessandro

APPLICANT: Sidney, John

APPLICANT: Southwood, Scott

APPLICANT: Chesnut, Robert

APPLICANT: Celis, Esteban

APPLICANT: Keogh, Elissa

TITLE OF INVENTION: Inducing Cellular Immune Responses to

FILE REFERENCE: 2060.0130001

CURRENT FILING DATE: 2000-12-11

PRIOR FILING DATE: 2000-12-11

PRIOR APPLICATION NUMBER: US 09/458,298

PRIOR FILING DATE: 1999-12-10

PRIOR APPLICATION NUMBER: US 09/189,702

PRIOR FILING DATE: 1998-11-10

PRIOR APPLICATION NUMBER: US 08/073,205

PRIOR FILING DATE: 1994-03-04

PRIOR APPLICATION NUMBER: US 08/159,184

PRIOR FILING DATE: 1993-11-29

PRIOR APPLICATION NUMBER: US 08/073,205

PRIOR FILING DATE: 1993-06-04

PRIOR APPLICATION NUMBER: US 08/027,146

PRIOR FILING DATE: 1993-03-05

NUMBER OF SEQ ID NOS: 2479

SOFTWARE: PatentIn version 3.1

SEQ ID NO 1979

LENGTH: 15

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Artificial Peptide

US-10-149-135-1979

Query Match

Best Local Similarity 91.5%; Score 65; DB 12; Length 15;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 FFPVIFSKASSLQL 15

Db 1 FFPVIFSKASSLQL 14

#### RESULT 3

US-10-149-135-2006

Sequence 2006, Application US/10149135

Publication No. US20040053822A1

GENERAL INFORMATION:

APPLICANT: Fikes, John

APPLICANT: Sette, Alessandro

APPLICANT: Sidney, John

APPLICANT: Southwood, Scott

APPLICANT: Chesnut, Robert

APPLICANT: Celis, Esteban

APPLICANT: Keogh, Elissa

TITLE OF INVENTION: Inducing Cellular Immune Responses to

FILE REFERENCE: 2060.0130001

CURRENT FILING DATE: 2000-12-11

PRIOR FILING DATE: 2000-12-11

PRIOR APPLICATION NUMBER: PCT/US00/33545

PRIOR FILING DATE: 1999-12-10

PRIOR APPLICATION NUMBER: US 09/458,298

PRIOR FILING DATE: 1998-11-10

PRIOR APPLICATION NUMBER: US 09/189,702

PRIOR FILING DATE: 1994-03-04

PRIOR APPLICATION NUMBER: US 08/205,713

PRIOR FILING DATE: 1993-11-29

PRIOR APPLICATION NUMBER: US 08/073,205

PRIOR FILING DATE: 1993-06-04

PRIOR APPLICATION NUMBER: US 08/027,146

PRIOR FILING DATE: 1993-03-05

NUMBER OF SEQ ID NOS: 2479

SOFTWARE: PatentIn version 3.1

SEQ ID NO 2006

LENGTH: 15

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Artificial Peptide

US-10-149-135-2006

Query Match

Best Local Similarity 87.3%; Score 62; DB 12; Length 15;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 FFPVIFSKASSL 13

Db 3 FFPVIFSKASSL 15

#### RESULT 4

US-10-149-135-1923

Sequence 1923, Application US/10149135

Publication No. US20040053822A1

GENERAL INFORMATION:

APPLICANT: Fikes, John

APPLICANT: Sette, Alessandro

APPLICANT: Sidney, John

APPLICANT: Southwood, Scott

APPLICANT: Chesnut, Robert

APPLICANT: Celis, Esteban

APPLICANT: Keogh, Elissa

TITLE OF INVENTION: Inducing Cellular Immune Responses to

FILE REFERENCE: 2060.0130001

CURRENT FILING DATE: 2000-12-11

PRIOR FILING DATE: 2000-12-11

PRIOR APPLICATION NUMBER: PCT/US00/33545

PRIOR FILING DATE: 2000-12-11

PRIOR APPLICATION NUMBER: US 09/458,298

PRIOR FILING DATE: 1999-12-10

PRIOR APPLICATION NUMBER: US 09/189,702

PRIOR FILING DATE: 1998-11-10

PRIOR APPLICATION NUMBER: US 08/205,713

PRIOR FILING DATE: 1994-03-04

PRIOR APPLICATION NUMBER: US 08/159,184

PRIOR FILING DATE: 1993-11-29

PRIOR APPLICATION NUMBER: US 08/073,205

PRIOR FILING DATE: 1993-06-04

PRIOR APPLICATION NUMBER: US 08/027,146

PRIOR FILING DATE: 1993-03-05

NUMBER OF SEQ ID NOS: 2479

SOFTWARE: PatentIn version 3.1

SEQ ID NO 1923

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: August 17, 2004, 17:19:33 ; Search time 11.7778 Seconds  
(without alignments)  
65.750 Million cell updates/sec

Title: US-09-914-239-11

Perfect score: 81

Sequence: 1 VLHNMVKISGGPHIS 15

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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  - 3: /cgn2\_6/protdata/2/aaa/6A.COMB.pdp:\*
  - 4: /cgn2\_6/protdata/2/aaa/6B.COMB.pdp:\*
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  - 6: /cgn2\_6/protdata/2/aaa/backfiles.pdp:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

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4	81	100.0	314	4	US-09-697-884-2
5	81	100.0	314	4	US-09-392-714-30
6	43	53.1	9	2	US-08-993-738A-12
7	43	53.1	9	4	US-09-241-268-12
8	43	53.1	9	4	US-09-495-562-12
9	43	53.1	132	4	US-09-134-001C-4209
10	43	53.1	475	4	US-09-252-991A-19146
11	43	53.1	624	4	US-09-252-991A-23659
12	41	50.6	144	4	US-09-621-976-5098
13	40	49.4	10	2	US-08-993-738A-9
14	40	49.4	10	4	US-08-713-354C-9
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17	40	49.4	11	1	US-08-217-188A-61
18	40	49.4	11	1	US-08-687-226-61
19	40	49.4	11	3	US-08-667-725B-61
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26	40	49.4	12	4	US-09-567-995-36
27	40	49.4	12	4	US-09-241-268-5

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Sequence 32, Appl  
Sequence 6, Appl  
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Sequence 38, Appl  
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Sequence 10, Appl  
Sequence 31, Appl  
Sequence 12098, A  
Sequence 2, Appl  
Sequence 28661, A  
Sequence 6913, Ap  
Sequence 9000, Ap  
Sequence 22625, A

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29 40 49.4 12 4 US-09-587-884-77  
30 40 49.4 12 4 US-09-495-562-5  
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32 40 49.4 12 4 US-09-574-749B-6  
33 40 49.4 12 4 US-09-318-141-32  
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36 40 49.4 100 4 US-09-755-665-40  
37 40 49.4 107 4 US-09-755-665-10  
38 40 49.4 760 4 US-09-323-872A-31  
39 40 49.4 760 4 US-09-072-433-35  
40 49.4 765 4 US-09-489-039A-12098  
41 39.5 48.8 382 3 US-09-142-551A-2  
42 39 48.1 194 4 US-09-352-991A-28661  
43 39 48.1 212 4 US-09-621-976-6913  
44 39 48.1 216 4 US-09-489-039A-9000  
45 39 48.1 327 4 US-09-252-991A-22625

## ALIGNMENTS

RESULT 1  
US-08-928-615-2  
; Sequence 2, Application US/08928615  
; Patent No. 5965535  
; GENERAL INFORMATION:  
; APPLICANT: Chau, Pascal  
; APPLICANT: Strobant, Vincent  
; APPLICANT: Boon, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED  
; NUMBER OF INVENTION: BY HLA CLASS II MOLECULES  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Wolf, Greenfield & Sacks, P.C.  
; STREET: 600 Atlantic Avenue  
; CITY: Boston  
; STATE: MA  
; COUNTRY: U.S.A.  
; ZIP: 02210-2211  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FASTSEQ for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/928,615  
; FILING DATE:  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Van Amsterdam, John R.  
; REGISTRATION NUMBER: 40,212  
; REFERENCE/DOCKET NUMBER: 10461/7017  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-720-3500  
; TELEFAX: 617-720-2441  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 314 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-928-615-2

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Best Local Similarity 100.0%; Pred. No. 1.7e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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Db      286 VLHWMVKISGPHS 300

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; Sequence 2, Application US/09166448
; Patent No. 6291430
; GENERAL INFORMATION:
; APPLICANT: Chauv, Pascal
; APPLICANT: Vantomme, Valrie
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon-Falleur, Thierry
; APPLICANT: van der Bruggen, Pierre
; APPLICANT: Thielemans, Kris
; APPLICANT: Cortals, Jurgen
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; FILE REFERENCE: L0461/7052
; CURRENT APPLICATION NUMBER: US/09/166,448
; CURRENT FILING DATE: 1998-10-05
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-166-448-2

Query Match      100.0%; Score 81; DB 3; Length 314;
Best Local Similarity 100.0%; Pred. No. 1.7e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 VLHWMVKISGPHS 15
Db      286 VLHWMVKISGPHS 300

RESULT 3
US-09-348-933-2
; Sequence 2, Application US/09348933
; Patent No. 6369211
; GENERAL INFORMATION:
; APPLICANT: Chauv, Pascal
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon-Falleur, Thierry
; APPLICANT: van der Bruggen, Pierre
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; FILE REFERENCE: L0461/7065
; CURRENT APPLICATION NUMBER: US/09/348,933
; CURRENT FILING DATE: 1999-07-07
; EARLIER APPLICATION NUMBER: US 08/928,615
; EARLIER FILING DATE: 1997-09-12
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-348-933-2

Query Match      100.0%; Score 81; DB 4; Length 314;
Best Local Similarity 100.0%; Pred. No. 1.7e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 VLHWMVKISGPHS 15
Db      286 VLHWMVKISGPHS 300

RESULT 4
US-09-697-884-2
; Sequence 2, Application US/09697884
; Patent No. 6426217
; GENERAL INFORMATION:

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; APPLICANT: Chauv, Pascal
; APPLICANT: Vantomme, Valrie
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon-Falleur, Thierry
; APPLICANT: van der Bruggen, Pierre
; APPLICANT: Thielemans, Kris
; APPLICANT: Cortals, Jurgen
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; FILE REFERENCE: L0461/7052
; CURRENT APPLICATION NUMBER: US/09/697,884
; CURRENT FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: 09/166,448
; PRIOR FILING DATE: 1998-10-05
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-697-884-2

Query Match      100.0%; Score 81; DB 4; Length 314;
Best Local Similarity 100.0%; Pred. No. 1.7e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 VLHWMVKISGPHS 15
Db      286 VLHWMVKISGPHS 300

RESULT 5
US-09-392-714-30
; Sequence 30, Application US/093927144
; Patent No. 6686147
; GENERAL INFORMATION:
; APPLICANT: Scanlan, Matthew J.
; APPLICANT: Gure, Ali O.
; APPLICANT: Williamson, Barbara
; APPLICANT: Chen, Yao-Tseng
; APPLICANT: Old, Lloyd J.
; TITLE OF INVENTION: Cancer Associated Antigens and Uses
; FILE REFERENCE: L0461/7062
; CURRENT APPLICATION NUMBER: US/09/392,7144
; CURRENT FILING DATE: 1999-09-09
; EARLIER APPLICATION NUMBER: PCT/US98/14679
; EARLIER FILING DATE: 1998-07-15
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 30
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-392-714-30

Query Match      100.0%; Score 81; DB 4; Length 314;
Best Local Similarity 100.0%; Pred. No. 1.7e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 VLHWMVKISGPHS 15
Db      286 VLHWMVKISGPHS 300

RESULT 6
US-08-993-738A-12
; Sequence 12, Application US/08993738A
; Patent No. 5928938
; GENERAL INFORMATION:
; APPLICANT: van der Bruggen, Pierre; Deplaen Etienne;
; APPLICANT: Boon-Falleur, Thierry
; TITLE OF INVENTION: Isolated Peptides Which Complex With
; TITLE OF INVENTION: HLA-Cw*16 Molecules, and Uses Thereof

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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: August 17, 2004, 17:19:33 ; Search time 11.7778 Seconds  
(without alignments)  
65.750 Million cell updates/sec

Title: US-09-914-239-10  
Perfect score: 77  
Sequence: 1 TSYVKVLLHMKVKSIG 15

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA.\*  
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3: /cgn2\_6/ptodata/2/iaa/6A\_COMB.pep.\*  
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5: /cgn2\_6/ptodata/2/iaa/PTCUS\_COMB.pep.\*  
6: /cgn2\_6/ptodata/2/iaa/backfiles1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	77	100.0	314	3	US-09-168-448-2
3	77	100.0	314	4	US-09-348-933-2
4	77	100.0	314	4	US-09-697-884-2
5	77	100.0	314	4	US-09-392-714-30
6	51	66.2	58	1	US-08-465-167A-1
7	51	66.2	58	4	US-08-627-820-1
8	51	66.2	309	1	US-08-465-167A-24
9	51	66.2	309	3	US-08-993-118-10
10	51	66.2	309	3	US-08-845-528C-10
11	51	66.2	309	4	US-08-627-820-24
12	51	66.2	309	4	US-09-066-281B-10
13	51	66.2	309	4	US-09-468-433C-10
14	51	66.2	309	4	US-09-392-714-29
15	43	55.8	413	4	US-09-215-694-6
16	42	54.5	632	4	US-09-853-533A-8
17	39	50.6	91	4	US-09-543-681A-4861
18	39	50.6	704	2	US-08-533-689A-17
19	39	50.6	704	4	US-09-183-861-17
20	39	50.6	704	4	US-09-022-765-17
21	39	50.6	704	4	US-09-551-974A-17
22	39	50.6	704	4	US-09-565-501A-17
23	39	50.6	704	4	US-09-639-206A-17
24	39	50.6	704	4	US-09-874-903-17
25	37	48.1	132	4	US-09-134-001C-4209
26	37	48.1	141	4	US-09-543-681A-4663
27	37	48.1	237	4	US-09-489-039A-12839

28	37	48.1	775	4	US-09-308-178B-1	Sequence 1, Appli
29	37	48.1	1212	4	US-09-268-866-2	Sequence 2, Appli
30	37	48.1	1368	4	US-09-967-908A-2	Sequence 2, Appli
31	36	46.8	297	4	US-09-489-039A-10089	Sequence 10089, A
32	36	46.8	312	4	US-09-134-001C-5432	Sequence 5432, Ap
33	36	46.8	479	4	US-09-134-001C-4128	Sequence 4128, Ap
34	36	46.8	555	4	US-09-173-151A-32	Sequence 32, Appli
35	36	46.8	605	4	US-09-252-991A-26408	Sequence 26408, A
36	36	46.8	660	4	US-09-134-001C-5039	Sequence 5039, Ap
37	35	45.5	9	1	US-08-465-167A-3	Sequence 3, Appli
38	35	45.5	9	3	US-08-159-339A-580	Sequence 580, App
39	35	45.5	9	4	US-08-627-820-3	Sequence 3, Appli
40	35	45.5	9	4	US-08-627-820-10	Sequence 10, Appli
41	35	45.5	10	1	US-08-465-167A-2	Sequence 2, Appli
42	35	45.5	10	1	US-08-465-167A-42	Sequence 42, Appli
43	35	45.5	10	3	US-08-159-339A-585	Sequence 585, App
44	35	45.5	10	4	US-08-627-820-2	Sequence 2, Appli
45	35	45.5	176	4	US-09-134-001C-4642	Sequence 4642, Ap

ALIGNMENTS

RESULT 1  
US-08-928-615-2  
; Sequence 2, Application US/08928615  
; Patent No. 5965535

GENERAL INFORMATION:  
; APPLICANT: Chau, Pascal  
; APPLICANT: Strobant, Vincent  
; APPLICANT: Boon, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED  
; TITLE OF INVENTION: BY HLA CLASS II MOLECULES  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Wolf, Greenfield & Sacks, P.C.  
; STREET: 600 Atlantic Avenue  
; CITY: Boston  
; STATE: MA  
; COUNTRY: U.S.A.  
; ZIP: 02210-2211

COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/928,615  
; FILING DATE:  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Van Amsterdam, John R.  
; REGISTRATION NUMBER: 40,212  
; REFERENCE/DOCKET NUMBER: L0461/7017  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-720-3500  
; TELEFAX: 617-720-2441  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 314 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: Protein  
US-08-928-615-2

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Best Local Similarity 100.0%; Pred. No. 5.7e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db      281 TSYVKVLHMHVKISG 295

RESULT 2
; Sequence 2, Application US/09166448
; Patent No. 6291430
; GENERAL INFORMATION:
; APPLICANT: Chauv, Pascal
; APPLICANT: Vantomme, Valrie
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon-Falleur, Thierry
; APPLICANT: van der Bruggen, Pierre
; APPLICANT: Thielemans, Kris
; APPLICANT: Cortals, Jurgien
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; FILE REFERENCE: L0461/7052
; CURRENT APPLICATION NUMBER: US/09/166,448
; PRIOR FILING DATE: 1998-10-05
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-166-448-2

Query Match      100.0%; Score 77; DB 3; Length 314;
Best Local Similarity 100.0%; Pred. No. 5.7e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 TSYVKVLHMHVKISG 15
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Db      281 TSYVKVLHMHVKISG 295

RESULT 3
US-09-348-933-2
; Sequence 2, Application US/09348933
; Patent No. 6369211
; GENERAL INFORMATION:
; APPLICANT: Chauv, Pascal
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon-Falleur, Thierry
; APPLICANT: van der Bruggen, Pierre
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; FILE REFERENCE: L0461/7065
; CURRENT APPLICATION NUMBER: US/09/348,933
; PRIOR FILING DATE: 1997-09-12
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-348-933-2

Query Match      100.0%; Score 77; DB 4; Length 314;
Best Local Similarity 100.0%; Pred. No. 5.7e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 TSYVKVLHMHVKISG 15
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Db      281 TSYVKVLHMHVKISG 295

RESULT 4
US-09-697-884-2
; Sequence 2, Application US/09697884
; Patent No. 6426217
; GENERAL INFORMATION:
; APPLICANT: Fikes, John D.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Sette, Alessandro D.
; APPLICANT: Sidney, John C.

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; APPLICANT: Chauv, Pascal
; APPLICANT: Vantomme, Valrie
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon-Falleur, Thierry
; APPLICANT: van der Bruggen, Pierre
; APPLICANT: Thielemans, Kris
; APPLICANT: Cortals, Jurgien
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; FILE REFERENCE: L0461/7052
; CURRENT APPLICATION NUMBER: US/09/697,884
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: 09/166,448
; PRIOR FILING DATE: 1998-10-05
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-697-884-2

Query Match      100.0%; Score 77; DB 4; Length 314;
Best Local Similarity 100.0%; Pred. No. 5.7e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 TSYVKVLHMHVKISG 15
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Db      281 TSYVKVLHMHVKISG 295

RESULT 5
US-09-392-714-30
; Sequence 30, Application US/093927144
; Patent No. 6686147
; GENERAL INFORMATION:
; APPLICANT: Scanlan, Matthew J.
; APPLICANT: Gure, Ali O.
; APPLICANT: Williamson, Barbara
; APPLICANT: Chen, Yao-Tseng
; APPLICANT: Old, Lloyd J.
; TITLE OF INVENTION: Cancer Associated Antigens and Uses
; FILE REFERENCE: L0461/7062
; CURRENT APPLICATION NUMBER: US/09/392,714A
; CURRENT FILING DATE: 1999-09-09
; EARLIER APPLICATION NUMBER: PCT/US98/14679
; PRIOR FILING DATE: 1998-07-15
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 30
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-392-714-30

Query Match      100.0%; Score 77; DB 4; Length 314;
Best Local Similarity 100.0%; Pred. No. 5.7e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 TSYVKVLHMHVKISG 15
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Db      281 TSYVKVLHMHVKISG 295

RESULT 6
US-08-465-167A-1
; Sequence 1, Application US/08465167A
; Patent No. 5750395
; GENERAL INFORMATION:
; APPLICANT: Fikes, John D.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Sette, Alessandro D.
; APPLICANT: Sidney, John C.

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GenCore version 5.1.6  
Copyright (C) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: August 17, 2004, 17:19:33 ; Search time 11.778 Seconds  
(without alignments)  
65.750 Million cell updates/sec

Title: US-09-914-239-8  
Perfect score: 74  
Sequence: 1 GDNQIMPKAGLLIIV 15

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

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5: /cgn2\_6/prodata/2/aaa/PCTUS-COMB.pdp:\*  
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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4	74	100.0	314	4	US-09-697-884-2
5	74	100.0	314	4	US-09-392-714-30
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7	66	89.2	309	2	US-08-993-118-10
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9	66	89.2	309	4	US-08-627-820-24
10	66	89.2	309	4	US-09-066-281B-10
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16	46	62.2	11	3	US-08-667-725B-35
17	46	62.2	11	3	US-09-007-748-35
18	44	59.5	10	3	US-08-159-339A-100
19	44	59.5	369	2	US-08-773-870-4
20	43	58.1	9	1	US-08-217-187-3
21	43	58.1	9	3	US-08-668-560-3
22	43	58.1	9	3	US-09-183-931-36
23	43	58.1	9	4	US-09-348-797-3
24	43	58.1	9	4	US-09-705-160-36
25	42	56.8	10	1	US-08-217-188A-34
26	42	56.8	10	1	US-08-687-226-34
27	42	56.8	10	3	US-08-667-725B-34

28	42	56.8	10	3	US-09-007-748-34	Sequence 34, Appl
29	42	56.8	1061	4	US-09-328-352-4445	Sequence 4445, Ap
30	39	52.7	673	4	US-08-352-991A-27111	Sequence 27111, A
31	39	52.7	787	4	US-09-352-991A-26468	Sequence 26468, A
32	39	52.7	1467	4	US-09-352-991A-17657	Sequence 17657, A
33	38	51.4	9	1	US-08-217-188A-33	Sequence 33, Appl
34	38	51.4	9	1	US-08-687-226-33	Sequence 33, Appl
35	38	51.4	9	3	US-08-667-725B-33	Sequence 33, Appl
36	38	51.4	9	3	US-09-007-748-33	Sequence 33, Appl
37	37	50.0	330	4	US-09-328-352-7359	Sequence 22, Appl
38	37	50.0	345	4	US-09-468-433C-22	Sequence 24124, A
39	37	50.0	390	4	US-09-252-991A-24124	Sequence 10044, A
40	37	50.0	1059	4	US-09-489-039A-10044	Sequence 26, Appl
41	36.5	49.3	407	4	US-09-468-433C-26	Sequence 80, Appl
42	36	48.6	96	3	US-08-946-329A-80	Sequence 14, Appl
43	36	48.6	273	3	US-08-928-213B-14	Sequence 4411, Ap
44	36	48.6	333	4	US-09-543-681A-4411	Sequence 5007, Ap
45	36	48.6	398	4	US-09-543-681A-5007	

## ALIGNMENTS

RESULT 1  
US-08-928-615-2  
Sequence 2, Application US/08928615  
Patent No. 5965535  
GENERAL INFORMATION:  
APPLICANT: Chau, Pascal  
APPLICANT: Stroobant, Vincent  
APPLICANT: Boon, Thierry  
APPLICANT: van der Bruggen, Pierre  
TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED  
TITLE OF INVENTION: BY HLA CLASS II MOLECULES  
NUMBER OF SEQUENCES: 13  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Wolf, Greenfield & Sacks, P.C.  
STREET: 600 Atlantic Avenue  
CITY: Boston  
STATE: MA  
COUNTRY: U.S.A.  
ZIP: 02210-2211  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
OPERATING SYSTEM: DOS  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/928,615  
FILING DATE:  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: Van Amsterdam, John R.  
REGISTRATION NUMBER: 40,212  
REFERENCE/DOCKET NUMBER: L0461/7017  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617-720-3500  
TELEFAX: 617-720-2441  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 314 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: Protein  
US-08-928-615-2

Query Match 100.0%; Score 74; DB 2; Length 314;

Best Local Similarity 100.0%; Pred. No. 1.3e-05; Indels 0; Gaps 0;  
Matches 15; Conservative 0; Mismatches 0

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Db      191 GDNQIMPAGLLIIV 205

RESULT 2
US-09-166-448-2
; Sequence 2, Application US/09166448
; Patent No. 6291430
; GENERAL INFORMATION:
; APPLICANT: Chauv, Pascal
; APPLICANT: Vantomme, Val,rie
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon-Falleur, Thierry
; APPLICANT: van der Bruggen, Pierre
; APPLICANT: Thielemans, Kris
; APPLICANT: Corthals, Jurgen
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; FILE REFERENCE: L0461/7052
; CURRENT APPLICATION NUMBER: US/09/166.448
; PRIOR FILING DATE: 1998-10-05
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-166-448-2

Query Match      100.0%; Score 74; DB 3; Length 314;
Best Local Similarity 100.0%; Pred. No. 1.3e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GDNQIMPAGLLIIV 15
Db      191 GDNQIMPAGLLIIV 205

RESULT 3
US-09-348-933-2
; Sequence 2, Application US/09348933
; Patent No. 6369211
; GENERAL INFORMATION:
; APPLICANT: Chauv, Pascal
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon-Falleur, Thierry
; APPLICANT: van der Bruggen, Pierre
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; FILE REFERENCE: L0461/7065
; CURRENT APPLICATION NUMBER: US/09/348.933
; CURRENT FILING DATE: 1999-07-07
; EARLIER APPLICATION NUMBER: US 08/928,615
; EARLIER FILING DATE: 1997-09-12
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-348-933-2

Query Match      100.0%; Score 74; DB 4; Length 314;
Best Local Similarity 100.0%; Pred. No. 1.3e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GDNQIMPAGLLIIV 15
Db      191 GDNQIMPAGLLIIV 205

RESULT 4
US-09-697-884-2
; Sequence 2, Application US/09697884
; Patent No. 6426217
; GENERAL INFORMATION:
; APPLICANT: Fikes, John D.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Sette, Alessandro D.
; APPLICANT: Sidney, John C.
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; APPLICANT: Chauv, Pascal
; APPLICANT: Vantomme, Val,rie
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon-Falleur, Thierry
; APPLICANT: van der Bruggen, Pierre
; APPLICANT: Thielemans, Kris
; APPLICANT: Corthals, Jurgen
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; FILE REFERENCE: L0461/7052
; CURRENT APPLICATION NUMBER: US/09/697.884
; CURRENT FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: 09/166,448
; PRIOR FILING DATE: 1998-10-05
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-697-884-2

Query Match      100.0%; Score 74; DB 4; Length 314;
Best Local Similarity 100.0%; Pred. No. 1.3e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GDNQIMPAGLLIIV 15
Db      191 GDNQIMPAGLLIIV 205

RESULT 5
US-09-392-714-30
; Sequence 30, Application US/09392714A
; Patent No. 6686147
; GENERAL INFORMATION:
; APPLICANT: Scanlan, Matthew J.
; APPLICANT: Gure, Ali O.
; APPLICANT: Williamson, Barbara
; APPLICANT: Chen, Yao-Tseng
; APPLICANT: Old, Lloyd J.
; TITLE OF INVENTION: Cancer Associated Antigens and Uses
; FILE REFERENCE: L0461/7062
; CURRENT APPLICATION NUMBER: US/09/392.714A
; CURRENT FILING DATE: 1999-09-09
; EARLIER APPLICATION NUMBER: PCT/US98/14679
; EARLIER FILING DATE: 1998-07-15
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 30
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-392-714-30

Query Match      100.0%; Score 74; DB 4; Length 314;
Best Local Similarity 100.0%; Pred. No. 1.3e-05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GDNQIMPAGLLIIV 15
Db      191 GDNQIMPAGLLIIV 205

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; Sequence 24, Application US/08465167A
; Patent No. 5750395
; GENERAL INFORMATION:
; APPLICANT: Fikes, John D.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Sette, Alessandro D.
; APPLICANT: Sidney, John C.
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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: August 17, 2004, 17:19:33 ; Search time 11.7778 Seconds  
(without alignments)  
65.750 Million cell updates/sec

Title: US-09-914-239-7  
Perfect score: 82  
Sequence: 1 PIGHLXIFATCIGLS 15

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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5: /cgn2\_6/ptodata/2/iaa/PTUS COMB.pcp.\*  
6: /cgn2\_6/ptodata/2/iaa/backfiles.pcp.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
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2	82	100.0	314	3	US-09-166-448-2
3	82	100.0	314	4	US-09-348-333-2
4	82	100.0	314	4	US-09-697-884-2
5	82	100.0	314	4	US-09-392-714-30
6	60	73.2	309	1	US-08-465-167A-24
7	60	73.2	309	2	US-08-993-118-10
8	60	73.2	309	3	US-08-845-528C-10
9	60	73.2	309	4	US-08-627-820-24
10	60	73.2	309	4	US-08-666-281B-10
11	60	73.2	309	4	US-09-468-433C-10
12	60	73.2	309	4	US-09-392-714-29
13	53	64.6	10	3	US-08-159-339A-601
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15	51	62.2	9	1	US-08-261-160A-5
16	51	62.2	9	2	US-08-290-381A-5
17	51	62.2	9	4	US-09-333-998B-5
18	51	62.2	11	1	US-08-217-188A-29
19	51	62.2	11	1	US-08-687-226-29
20	51	62.2	11	3	US-08-667-725B-29
21	51	62.2	11	3	US-09-007-748-29
22	45	56.1	10	1	US-08-186-266-20
23	45	54.9	596	4	US-09-489-039A-9470
24	43	52.4	10	3	US-08-159-339A-1213
25	43	52.4	369	2	US-08-773-870-4
26	42	51.2	9	1	US-08-186-266-17
27	42	51.2	9	3	US-08-159-339A-1214

Sequence 28, Appl  
Sequence 28, Appl  
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Sequence 28, Appl  
Sequence 2, Appl  
Sequence 3, Appl  
Sequence 488, App  
Sequence 489, App  
Sequence 5171, Ap  
Sequence 30, Appl  
Sequence 30, Appl  
Sequence 30, Appl  
Sequence 6084, Ap  
Sequence 1251, Ap  
Sequence 7503, Ap  
Sequence 4299, Ap

ALIGNMENTS

RESULT 1  
US-08-928-615-2  
; Sequence 2, Application US/08928615  
; Patent No. 5965535  
; GENERAL INFORMATION:  
; APPLICANT: Chau, Pascal  
; APPLICANT: Strobant, Vincent  
; APPLICANT: Boon, Thierry  
; TITLE OF INVENTION: van der Bruggen, Pierre  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED  
; TITLE OF INVENTION: BY HLA CLASS II MOLECULES  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Wolf, Greenfield & Sacks, P.C.  
; CITY: Boston  
; STATE: MA  
; COUNTRY: U.S.A.  
; ZIP: 02210-2211  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: PastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA: US/08/928,615  
; FILING DATE:  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Van Amsterdam, John R.  
; REGISTRATION NUMBER: 40,212  
; REFERENCE/DOCKET NUMBER: L0461/7017  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-720-3500  
; TELEFAX: 617-720-2441  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-928-615-2

Query Match 100.0%; Score 82; DB 2; Length 314;  
Best Local Similarity 100.0%; Pred. NO. 1.7e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 PIGHLXIFATCIGLS 15  
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Db 171 PIGHLYIFATCLGLS 185

## RESULT 2

US-09-166-448-2  
; Sequence 2, Application US/09166448

; Patent No. 6291430

; GENERAL INFORMATION:

; APPLICANT: Chaux, Pascal

; APPLICANT: Vantomme, Valrie

; APPLICANT: Stroobant, Vincent

; APPLICANT: Boon-Falleur, Thierry

; APPLICANT: van der Bruggen, Pierre

; APPLICANT: Thielemans, Kris

; APPLICANT: Cortthals, Jurgem

; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES

; FILE REFERENCE: L0461/7052

; CURRENT APPLICATION NUMBER: US/09/166,448

; PRIOR FILING DATE: 1998-10-05

; NUMBER OF SEQ ID NOS: 81

; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 2

; LENGTH: 314

; TYPE: PRT

; ORGANISM: Homo sapiens

; US-09-166-448-2

Query Match 100.0%; Score 82; DB 3; Length 314;

Best Local Similarity 100.0%; Pred. No. 1.7e-06;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PIGHLYIFATCLGLS 15

Db 171 PIGHLYIFATCLGLS 185

## RESULT 3

US-09-348-933-2

; Sequence 2, Application US/09348933

; Patent No. 6369211

; GENERAL INFORMATION:

; APPLICANT: Chaux, Pascal

; APPLICANT: Stroobant, Vincent

; APPLICANT: Boon-Falleur, Thierry

; APPLICANT: van der Bruggen, Pierre

; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES

; FILE REFERENCE: L0461/7065

; CURRENT APPLICATION NUMBER: US/09/348,933

; PRIOR FILING DATE: 1999-07-07

; EARLIER APPLICATION NUMBER: US 08/928,615

; NUMBER OF SEQ ID NOS: 13

; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 2

; LENGTH: 314

; TYPE: PRT

; ORGANISM: Homo sapiens

; US-09-348-933-2

Query Match 100.0%; Score 82; DB 4; Length 314;

Best Local Similarity 100.0%; Pred. No. 1.7e-06;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PIGHLYIFATCLGLS 15

Db 171 PIGHLYIFATCLGLS 185

## RESULT 4

US-09-697-884-2

; Sequence 2, Application US/09697884

; Patent No. 6426217

; GENERAL INFORMATION:

; APPLICANT: Fikes, John D.

; APPLICANT: Livingston, Brian D.

; APPLICANT: Sette, Alessandro D.

; APPLICANT: Sidney, John C.

; APPLICANT: Chaux, Pascal  
; APPLICANT: Vantomme, Valrie  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; APPLICANT: Thielemans, Kris  
; APPLICANT: Cortthals, Jurgem  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7052  
; CURRENT APPLICATION NUMBER: US/09/697,884  
; PRIOR FILING DATE: 2000-10-27  
; PRIOR APPLICATION NUMBER: 09/166,448  
; PRIOR FILING DATE: 1998-10-05  
; NUMBER OF SEQ ID NOS: 81  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; US-09-697-884-2

Query Match 100.0%; Score 82; DB 4; Length 314;

Best Local Similarity 100.0%; Pred. No. 1.7e-06;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PIGHLYIFATCLGLS 15

Db 171 PIGHLYIFATCLGLS 185

## RESULT 5

US-09-392-714-30

; Sequence 30, Application US/09392714A

; Patent No. 6686147

; GENERAL INFORMATION:

; APPLICANT: Scanlan, Matthew J.

; APPLICANT: Gure, Ali O.

; APPLICANT: Williamson, Barbara

; APPLICANT: Chen, Yao-Tseng

; APPLICANT: Old, Lloyd J.

; TITLE OF INVENTION: Cancer Associated Antigens and Uses

; FILE REFERENCE: L0461/7062

; CURRENT APPLICATION NUMBER: US/09/392,714A

; CURRENT FILING DATE: 1999-09-09

; EARLIER APPLICATION NUMBER: PCT/US98/14679

; NUMBER OF SEQ ID NOS: 30

; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 30

; LENGTH: 314

; TYPE: PRT

; ORGANISM: Homo sapiens

; US-09-392-714-30

Query Match 100.0%; Score 82; DB 4; Length 314;

Best Local Similarity 100.0%; Pred. No. 1.7e-06;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PIGHLYIFATCLGLS 15

Db 171 PIGHLYIFATCLGLS 185

## RESULT 6

US-08-465-167A-24

; Sequence 24, Application US/08465167A

; Patent No. 5750395

; GENERAL INFORMATION:

; APPLICANT: Fikes, John D.

; APPLICANT: Livingston, Brian D.

; APPLICANT: Sette, Alessandro D.

; APPLICANT: Sidney, John C.

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: August 17, 2004, 17:19:33 ; Search time 11.7778 Seconds  
(without alignments)  
65.750 Million cell updates/sec

Title: US-09-914-239-6

Perfect score: 78

Sequence: 1 VFGIELMEVDPIGHL 15

Scoring table: BLOSUM62

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Searched: 389414 seqs, 51625971 residues

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Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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- 3: /cgn2\_6/prodata/2/1aa/6A\_COMB.pep:\*
- 4: /cgn2\_6/prodata/2/1aa/6B\_COMB.pep:\*
- 5: /cgn2\_6/prodata/2/1aa/PCTUS\_COMB.pep:\*
- 6: /cgn2\_6/prodata/2/1aa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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2	78	100.0	314	3	US-09-166-448-2
3	78	100.0	314	4	US-09-348-933-2
4	78	100.0	314	4	US-09-697-884-2
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9	74	94.9	16	4	US-09-697-884-6
10	57	73.1	369	2	US-08-773-870-4
11	53	67.9	309	1	US-08-465-167A-24
12	53	67.9	309	2	US-08-993-118-10
13	53	67.9	309	3	US-08-845-528C-10
14	53	67.9	309	4	US-08-827-820-24
15	53	67.9	309	4	US-09-066-284B-10
16	53	67.9	309	4	US-09-468-433C-10
17	53	67.9	309	4	US-09-392-714-29
18	51	65.4	380	2	US-08-773-870-5
19	49	62.8	10	1	US-08-796-883-17
20	49	62.8	10	2	US-09-036-582-5
21	49	62.8	10	2	US-08-531-864-17
22	49	62.8	10	3	US-08-502-506A-17
23	49	62.8	10	3	US-09-266-294-17
24	49	62.8	10	3	US-09-183-931-37
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26	49	62.8	10	3	US-09-166-448-49
27	49	62.8	10	4	US-09-567-995-8

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Sequence 6, Appl  
Sequence 4, Appl  
Sequence 17, Appl  
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Sequence 17, Appl  
Sequence 51, Appl  
Sequence 11, Appl  
Sequence 23, Appl

ALIGNMENTS

RESULT 1  
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; Patent No. 5965335  
; GENERAL INFORMATION:  
; APPLICANT: Chau, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED  
; TITLE OF INVENTION: BY HLA CLASS II MOLECULES  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Wolf, Greenfield & Sacks, P.C.  
; STREET: 600 Atlantic Avenue  
; CITY: Boston  
; STATE: MA  
; COUNTRY: U.S.A.  
; ZIP: 02210-2211  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FASTSEQ for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/928,615  
; FILING DATE:  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Van Amsterdam, John R.  
; REGISTRATION NUMBER: 40,212  
; REFERENCE/DOCKET NUMBER: L0461/7017  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-720-3500  
; TELEFAX: 617-720-2441  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 314 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-928-615-2

Query Match 100.0%; Score 78; DB 2; Length 314;

Best Local Similarity 100.0%; Fred. NO. 9.1e-07; Indels 0; Caps 0;  
Matches 15; Conservative 0; Mismatches 0;

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Db 161 VFGIELMEVDPIGHL 175

# RESULT 2

US-09-166-448-2  
; Sequence 2, Application US/09166448  
; Patent No. 6291430  
; GENERAL INFORMATION:  
; APPLICANT: Chauv, Pascal  
; APPLICANT: Vantomme, Valrie  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; APPLICANT: Thielemans, Kris  
; APPLICANT: Corthals, Jurgén  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7052  
; CURRENT APPLICATION NUMBER: US/09/166,448  
; CURRENT FILING DATE: 1998-10-05  
; NUMBER OF SEQ ID NOS: 81  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-166-448-2

Query Match 100.0%; Score 78; DB 3; Length 314;  
Best Local Similarity 100.0%; Pred. No. 9.1e-07;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VFGIELMEVDPIGHL 15  
Db 161 VFGIELMEVDPIGHL 175

# RESULT 3

US-09-348-933-2  
; Sequence 2, Application US/09348933  
; Patent No. 6369211  
; GENERAL INFORMATION:  
; APPLICANT: Chauv, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7065  
; CURRENT APPLICATION NUMBER: US/09/348,933  
; CURRENT FILING DATE: 1999-07-07  
; EARLIER APPLICATION NUMBER: US 08/928,615  
; EARLIER FILING DATE: 1997-09-12  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-348-933-2

Query Match 100.0%; Score 78; DB 4; Length 314;  
Best Local Similarity 100.0%; Pred. No. 9.1e-07;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VFGIELMEVDPIGHL 15  
Db 161 VFGIELMEVDPIGHL 175

# RESULT 4

US-09-697-884-2  
; Sequence 2, Application US/09697884  
; Patent No. 6426217  
; GENERAL INFORMATION:  
; APPLICANT: Chauv, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon, Thierry  
; APPLICANT: van der Bruggen, Pierre

; APPLICANT: Chauv, Pascal  
; APPLICANT: Vantomme, Valrie  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; APPLICANT: Thielemans, Kris  
; APPLICANT: Corthals, Jurgén  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7052  
; CURRENT APPLICATION NUMBER: US/09/697,884  
; CURRENT FILING DATE: 2000-10-27  
; PRIOR APPLICATION NUMBER: 09/166,448  
; PRIOR FILING DATE: 1998-10-05  
; NUMBER OF SEQ ID NOS: 81  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-697-884-2

Query Match 100.0%; Score 78; DB 4; Length 314;  
Best Local Similarity 100.0%; Pred. No. 9.1e-07;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VFGIELMEVDPIGHL 15  
Db 161 VFGIELMEVDPIGHL 175

# RESULT 5

US-09-392-714-30  
; Sequence 30, Application US/09392714A  
; Patent No. 6686147  
; GENERAL INFORMATION:  
; APPLICANT: Scanlan, Matthew J.  
; APPLICANT: Gure, Ali O.  
; APPLICANT: Williamson, Barbara  
; APPLICANT: Chen, Yao-Tseeng  
; APPLICANT: Old, Lloyd J.  
; TITLE OF INVENTION: Cancer Associated Antigens and Uses  
; FILE REFERENCE: L0461/7062  
; CURRENT APPLICATION NUMBER: US/09/392,714A  
; CURRENT FILING DATE: 1999-09-09  
; EARLIER APPLICATION NUMBER: PCT/US98/14679  
; EARLIER FILING DATE: 1998-07-15  
; NUMBER OF SEQ ID NOS: 30  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 30  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-392-714-30

Query Match 100.0%; Score 78; DB 4; Length 314;  
Best Local Similarity 100.0%; Pred. No. 9.1e-07;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VFGIELMEVDPIGHL 15  
Db 161 VFGIELMEVDPIGHL 175

# RESULT 6

US-08-928-615-6  
; Sequence 6, Application US/08928615  
; Patent No. 5965535  
; GENERAL INFORMATION:  
; APPLICANT: Chauv, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon, Thierry  
; APPLICANT: van der Bruggen, Pierre

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: August 17, 2004, 17:19:33 ; Search time 11.7778 Seconds  
(without alignments)  
65.750 Million cell updates/sec

Title: US-09-914-239-5  
Perfect score: 70  
Sequence: 1 SSLLQVFGIELMEVD 15

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA.\*  
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4: /cgn2\_6/ptodata/2/iaa/6B\_COMB.pep.\*  
5: /cgn2\_6/ptodata/2/iaa/PCTUS\_COMB.pep.\*  
6: /cgn2\_6/ptodata/2/iaa/backfiles.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	70	100.0	314	2	US-08-928-615-2
2	70	100.0	314	3	US-09-166-448-2
3	70	100.0	314	4	US-09-348-933-2
4	70	100.0	314	4	US-09-697-884-2
5	70	100.0	314	4	US-09-392-714-30
6	58	82.9	16	2	US-08-928-615-6
7	58	82.9	16	3	US-09-166-448-6
8	58	82.9	16	4	US-09-348-933-6
9	58	82.9	16	4	US-09-697-884-6
10	52	74.3	11	4	US-09-543-608A-24
11	50	71.4	309	1	US-08-465-167A-24
12	50	71.4	309	2	US-08-993-118-10
13	50	71.4	309	3	US-08-845-528C-10
14	50	71.4	309	4	US-08-627-820-24
15	50	71.4	309	4	US-09-066-281B-10
16	50	71.4	309	4	US-09-468-433C-10
17	50	71.4	309	4	US-09-392-714-29
18	50	71.4	380	2	US-08-773-870-5
19	47	67.1	10	4	US-08-197-484-83
20	47	67.1	10	4	US-08-197-484-142
21	47	67.1	10	4	US-09-543-608A-23
22	47	67.1	10	5	PCT-US95-02121-83
23	47	67.1	10	5	PCT-US95-02121-142
24	47	67.1	606	4	US-09-362-123A-6
25	45	64.3	11	1	US-08-217-188A-7
26	45	64.3	11	1	US-08-587-226-7
27	45	64.3	11	3	US-08-667-725B-7

28	45	64.3	11	3	US-09-007-748-7	Sequence 7, Appli
29	41	58.6	369	2	US-08-773-870-4	Sequence 4, Appli
30	41	58.6	1142	2	US-08-993-118-7	Sequence 7, Appli
31	41	58.6	1142	3	US-08-845-528C-7	Sequence 7, Appli
32	41	58.6	1142	3	US-09-061-709-2	Sequence 2, Appli
33	41	58.6	1142	4	US-09-066-281B-7	Sequence 7, Appli
34	41	58.6	1142	4	US-09-899-651-2	Sequence 2, Appli
35	41	58.6	1142	4	US-08-468-433C-7	Sequence 7, Appli
36	41	58.6	1142	4	US-09-392-714-26	Sequence 26, Appli
37	40	57.1	11	1	US-08-217-188A-25	Sequence 25, Appli
38	40	57.1	11	1	US-08-687-725B-25	Sequence 25, Appli
39	40	57.1	11	3	US-09-007-748-25	Sequence 25, Appli
40	40	57.1	10	1	US-08-217-188A-5	Sequence 5, Appli
41	39	55.7	10	1	US-08-687-226-5	Sequence 5, Appli
42	39	55.7	10	3	US-08-667-725B-5	Sequence 5, Appli
43	39	55.7	10	3	US-09-007-748-5	Sequence 5, Appli
44	39	55.7	10	3	US-09-183-931-32	Sequence 32, Appli
45	39	55.7	10	3	US-09-183-931-32	Sequence 32, Appli

ALIGNMENTS

RESULT 1  
US-08-928-615-2  
; Sequence 2, Application US/08928615  
; Patent No. 5965535  
; GENERAL INFORMATION:  
; APPLICANT: Chauv, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED  
; TITLE OF INVENTION: BY HLA CLASS II MOLECULES  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Wolf, Greenfield & Sacks, P.C.  
; STREET: 600 Atlantic Avenue  
; CITY: Boston  
; STATE: MA  
; COUNTRY: U.S.A.  
; ZIP: 02210-2211  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FASTSEQ for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/928,615  
; FILING DATE:  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: van Amsterdam, John R.  
; REGISTRATION NUMBER: 40,212  
; REFERENCE/DOCKET NUMBER: L0461/7017  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-720-3500  
; TELEFAX: 617-720-2441  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 314 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-08-928-615-2

Query Match 100.0%; Score 70; DB 2; Length 314;  
Best Local Similarity 100.0%; Pred. No. 2.8e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 SSLLQVFGIELMEVD 15  
|||||

Db 156 SSLQLVFGIELMEVD 170

## RESULT 2

US-09-166-448-2  
; Sequence 2, Application US/09166448  
; Patent No. 6291430  
; GENERAL INFORMATION:  
; APPLICANT: Chauv, Pascal  
; APPLICANT: Vantomme, Valerie  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; APPLICANT: Thielemans, Kris  
; APPLICANT: Cortals, Jurgen  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7052  
; CURRENT APPLICATION NUMBER: US/09/166,448  
; CURRENT FILING DATE: 1998-10-05  
; NUMBER OF SEQ ID NOS: 81  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-166-448-2

Query Match 100.0%; Score 70; DB 3; Length 314;  
Best Local Similarity 100.0%; Pred. No. 2.8e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSLQLVFGIELMEVD 15  
Db 156 SSLQLVFGIELMEVD 170

## RESULT 3

US-09-348-933-2  
; Sequence 2, Application US/09348933  
; Patent No. 6369211  
; GENERAL INFORMATION:  
; APPLICANT: Chauv, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7065  
; CURRENT APPLICATION NUMBER: US/09/348,933  
; CURRENT FILING DATE: 1999-07-07  
; EARLIER APPLICATION NUMBER: US 08/928,615  
; EARLIER FILING DATE: 1997-09-12  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-348-933-2

Query Match 100.0%; Score 70; DB 4; Length 314;  
Best Local Similarity 100.0%; Pred. No. 2.8e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSLQLVFGIELMEVD 15  
Db 156 SSLQLVFGIELMEVD 170

## RESULT 4

US-09-697-884-2  
; Sequence 2, Application US/09697884  
; Patent No. 6426217  
; GENERAL INFORMATION:  
; APPLICANT: Chauv, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon, Thierry  
; APPLICANT: van der Bruggen, Pierre

; APPLICANT: Chauv, Pascal  
; APPLICANT: Vantomme, Valerie  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; APPLICANT: Thielemans, Kris  
; APPLICANT: Cortals, Jurgen  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7052  
; CURRENT APPLICATION NUMBER: US/09/697,884  
; CURRENT FILING DATE: 2000-10-27  
; PRIOR APPLICATION NUMBER: 09/166,448  
; PRIOR FILING DATE: 1998-10-05  
; NUMBER OF SEQ ID NOS: 81  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-697-884-2

Query Match 100.0%; Score 70; DB 4; Length 314;  
Best Local Similarity 100.0%; Pred. No. 2.8e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSLQLVFGIELMEVD 15  
Db 156 SSLQLVFGIELMEVD 170

## RESULT 5

US-09-392-714-30  
; Sequence 30, Application US/09392714A  
; Patent No. 6686147  
; GENERAL INFORMATION:  
; APPLICANT: Scanlan, Matthew J.  
; APPLICANT: Gure, Ali O.  
; APPLICANT: Williamson, Barbara  
; APPLICANT: Chen, Yao-Tsung  
; APPLICANT: Old, Lloyd J.  
; TITLE OF INVENTION: Cancer Associated Antigens and Uses  
; TITLE OF INVENTION: Therefor  
; FILE REFERENCE: L0461/7062  
; CURRENT APPLICATION NUMBER: US/09/392,714A  
; CURRENT FILING DATE: 1999-09-09  
; EARLIER APPLICATION NUMBER: PCT/US98/14679  
; EARLIER FILING DATE: 1998-07-15  
; NUMBER OF SEQ ID NOS: 30  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 30  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-392-714-30

Query Match 100.0%; Score 70; DB 4; Length 314;  
Best Local Similarity 100.0%; Pred. No. 2.8e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSLQLVFGIELMEVD 15  
Db 156 SSLQLVFGIELMEVD 170

## RESULT 6

US-08-928-615-6  
; Sequence 6, Application US/08928615  
; Patent No. 5965535  
; GENERAL INFORMATION:  
; APPLICANT: Chauv, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon, Thierry  
; APPLICANT: van der Bruggen, Pierre

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: August 17, 2004, 17:19:33 ; Search time 11.7778 seconds  
(without alignments)  
65.750 Million cell updates/sec

Title: US-09-914-239-4  
Perfect score: 71  
Sequence: 1 FFPVIFSKASSLQ 15  
Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5  
Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
Maximum DB seq length: 20000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA:\*  
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3: /cgn2\_6/ptodata/2/iaa/6A-COMB.pep:\*  
4: /cgn2\_6/ptodata/2/iaa/6B-COMB.pep:\*  
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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5	71	100.0	314	4	US-09-166-448-2
6	51	71.8	309	1	US-08-465-167A-24
7	51	71.8	309	2	US-08-993-118-10
8	51	71.8	309	3	US-08-993-118-10
9	51	71.8	309	4	US-08-993-118-10
10	51	71.8	309	4	US-08-993-118-10
11	51	71.8	309	4	US-08-993-118-10
12	51	71.8	309	4	US-08-993-118-10
13	42	59.2	15	3	US-08-159-339A-1215
14	42	59.2	15	3	US-08-159-339A-1215
15	41	57.7	1142	3	US-08-993-118-7
16	41	57.7	1142	3	US-08-993-118-7
17	41	57.7	1142	3	US-08-993-118-7
18	41	57.7	1142	3	US-08-993-118-7
19	41	57.7	1142	4	US-09-061-709-2
20	41	57.7	1142	4	US-09-061-709-2
21	41	57.7	1142	4	US-09-061-709-2
22	41	57.7	1142	4	US-09-061-709-2
23	39	54.9	2232	3	US-08-159-339A-1220
24	39	54.9	2232	3	US-09-091-219-25
25	39	54.9	2232	4	US-09-091-219-25
26	39	54.9	2247	3	US-09-091-219-2
27	39	54.9	2247	4	US-09-091-219-2

28	38	53.5	10	3	US-08-159-339A-1207	Sequence 1207, Ap
29	38	53.5	60	4	US-09-621-976-5831	Sequence 5831, Ap
30	38	53.5	249	2	US-08-389-386-5	Sequence 5, Appl
31	38	53.5	369	2	US-08-773-870-4	Sequence 4, Appl
32	38	53.5	473	4	US-09-543-681A-7772	Sequence 7772, Ap
33	38	53.5	473	4	US-09-177-419C-2	Sequence 2, Appl
34	37	52.1	314	4	US-09-362-336A-16	Sequence 16, Appl
35	37	52.1	511	4	US-09-679-686B-12	Sequence 12, Appl
36	36	50.7	368	2	US-08-869-137-2	Sequence 2, Appl
37	36	50.7	383	4	US-09-627-650B-20	Sequence 20, Appl
38	36	50.7	474	1	US-08-417-330A-20	Sequence 20, Appl
39	35	49.3	121	4	US-09-352-991A-17191	Sequence 17191, A
40	35	49.3	121	4	US-09-134-000C-3418	Sequence 3418, Ap
41	35	49.3	126	2	US-08-702-105A-27	Sequence 27, Appl
42	35	49.3	126	3	US-08-702-110A-27	Sequence 27, Appl
43	35	49.3	126	3	US-09-325-571-27	Sequence 27, Appl
44	35	49.3	126	4	US-09-848-585-27	Sequence 27, Appl
45	35	49.3	127	2	US-08-702-105A-25	Sequence 25, Appl

## ALIGNMENTS

RESULT 1  
US-08-928-615-2  
; Sequence 2, Application US/08928615  
; Patent No. 5965535  
; GENERAL INFORMATION:  
; APPLICANT: Chau, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED  
; TITLE OF INVENTION: BY HLA CLASS II MOLECULES  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Wolf, Greenfield & Sacks, P.C.  
; STREET: 600 Atlantic Avenue  
; CITY: Boston  
; STATE: MA  
; COUNTRY: U.S.A.  
; ZIP: 02210-2211  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/928,615  
; FILING DATE:  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Van Amsterdam, John R.  
; REGISTRATION NUMBER: 40,212  
; REFERENCE/DOCKET NUMBER: L0461/7017  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-720-3500  
; TELEFAX: 617-720-2441  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 314 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-928-615-2

Query Match 100.0%; Score 71; DB 2; Length 314;  
Best Local Similarity 100.0%; Pred. No. 2.6e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 FFPVIFSKASSLQ 15  
|||||

Db 146 FFPVIFSKASSLQL 160

## RESULT 2

US-09-166-448-2  
; Sequence 2, Application US/09166448  
; Patent No. 6291430  
; GENERAL INFORMATION:  
; APPLICANT: Chauv, Pascal  
; APPLICANT: Vantomme, Valrie  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; APPLICANT: Thielemans, Kris  
; APPLICANT: Corthals, Jurgan  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7052  
; CURRENT APPLICATION NUMBER: US/09/166,448  
; PRIOR FILING DATE: 1998-10-05  
; NUMBER OF SEQ ID NOS: 81  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-166-448-2

Query Match 100.0%; Score 71; DB 3; Length 314;  
Best Local Similarity 100.0%; Pred. No. 2.6e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFPVIFSKASSLQL 15

Db 146 FFPVIFSKASSLQL 160

## RESULT 3

US-09-348-933-2  
; Sequence 2, Application US/09348933  
; Patent No. 6369211  
; GENERAL INFORMATION:  
; APPLICANT: Chauv, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7065  
; CURRENT APPLICATION NUMBER: US/09/348,933  
; PRIOR FILING DATE: 1997-07-07  
; EARLIER FILING DATE: 1997-09-12  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-348-933-2

Query Match 100.0%; Score 71; DB 4; Length 314;  
Best Local Similarity 100.0%; Pred. No. 2.6e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFPVIFSKASSLQL 15

Db 146 FFPVIFSKASSLQL 160

## RESULT 4

US-09-697-884-2  
; Sequence 2, Application US/09697884  
; Patent No. 6426217  
; GENERAL INFORMATION:  
; APPLICANT: Fikes, John D.  
; APPLICANT: Livingston, Brian D.  
; APPLICANT: Sette, Alessandro D.  
; APPLICANT: Sidney, John C.

; APPLICANT: Chauv, Pascal  
; APPLICANT: Vantomme, Valrie  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; APPLICANT: Thielemans, Kris  
; APPLICANT: Corthals, Jurgan  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7052  
; CURRENT APPLICATION NUMBER: US/09/697,884  
; PRIOR FILING DATE: 2000-10-27  
; PRIOR APPLICATION NUMBER: 09/166,448  
; NUMBER OF SEQ ID NOS: 81  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-697-884-2

Query Match 100.0%; Score 71; DB 4; Length 314;  
Best Local Similarity 100.0%; Pred. No. 2.6e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFPVIFSKASSLQL 15

Db 146 FFPVIFSKASSLQL 160

## RESULT 5

US-09-392-714-30  
; Sequence 30, Application US/09392714A  
; Patent No. 6886147  
; GENERAL INFORMATION:  
; APPLICANT: Scanlan, Matthew J.  
; APPLICANT: Gure, Ali O.  
; APPLICANT: Williamson, Barbara  
; APPLICANT: Chen, Yao-Tseng  
; APPLICANT: Old, Lloyd J.  
; TITLE OF INVENTION: Cancer Associated Antigens and Uses  
; FILE REFERENCE: L0461/7062  
; CURRENT APPLICATION NUMBER: US/09/392,714A  
; CURRENT FILING DATE: 1999-09-09  
; EARLIER APPLICATION NUMBER: PCT/US98/14679  
; EARLIER FILING DATE: 1998-07-15  
; NUMBER OF SEQ ID NOS: 30  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 30  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-392-714-30

Query Match 100.0%; Score 71; DB 4; Length 314;  
Best Local Similarity 100.0%; Pred. No. 2.6e-05;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 FFPVIFSKASSLQL 15

Db 146 FFPVIFSKASSLQL 160

## RESULT 6

US-08-465-167A-24  
; Sequence 24, Application US/08465167A  
; Patent No. 5750395  
; GENERAL INFORMATION:  
; APPLICANT: Fikes, John D.  
; APPLICANT: Livingston, Brian D.  
; APPLICANT: Sette, Alessandro D.  
; APPLICANT: Sidney, John C.

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: August 17, 2004, 17:19:33 ; Search time 11.7778 Seconds  
(without alignments)  
65.750 Million cell updates/sec

Title: US-09-914-239-3

Perfect score: 85

Sequence: 1 GNMQYFFPVIFSKAS 15

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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- 4: /cgm2\_6/ptodata/2/iaa/6B.COMB.pep.\*
- 5: /cgm2\_6/ptodata/2/iaa/PCTUS.COMB.pep.\*
- 6: /cgm2\_6/ptodata/2/iaa/backfiles1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

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4	85	100.0	314	4	US-09-697-884-2
5	85	100.0	314	4	US-09-392-714-30
6	77	90.6	15	3	US-08-159-339A-1215
7	62	72.9	10	3	US-08-159-339A-1218
8	56	65.9	9	3	US-08-159-339A-1217
9	49	57.6	9	3	US-08-465-167A-24
10	43	50.6	309	1	US-08-993-118-10
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12	43	50.6	309	3	US-08-845-528C-10
13	43	50.6	309	4	US-08-627-820-24
14	43	50.6	309	4	US-09-066-281B-10
15	43	50.6	309	4	US-09-468-433C-10
16	43	50.6	309	4	US-09-392-714-29
17	42	49.4	440	4	US-08-252-991A-21718
18	42	49.4	724	3	US-08-793-331-4
19	42	49.4	725	3	US-08-793-331-6
20	41	48.2	46	1	US-08-118-270-199
21	41	48.2	46	5	PCT-US93-08528-199
22	41	48.2	369	2	US-08-773-870-4
23	41	48.2	772	4	US-09-907-794A-339
24	41	48.2	772	4	US-09-905-125A-339
25	41	48.2	772	4	US-09-902-775A-339
26	40.5	47.6	171	4	US-09-489-039A-9991
27	40	47.1	823	1	US-07-745-206A-15

28	40	47.1	823	2	US-08-311-363-15	Sequence 15, Appl
29	40	47.1	1754	1	US-07-745-206A-13	Sequence 13, Appl
30	40	47.1	1754	2	US-08-311-363-13	Sequence 13, Appl
31	40	47.1	2237	1	US-08-455-543A-48	Sequence 48, Appl
32	40	47.1	2237	2	US-08-223-305C-48	Sequence 48, Appl
33	40	47.1	2237	4	US-09-268-163-8	Sequence 8, Appl
34	40	47.1	2265	2	US-08-149-097D-36	Sequence 36, Appl
35	40	47.1	2336	4	US-09-268-163-10	Sequence 10, Appl
36	40	47.1	2337	3	US-08-713-118-2	Sequence 2, Appl
37	40	47.1	2337	3	US-09-452-007-2	Sequence 2, Appl
38	40	47.1	2339	1	US-08-455-543A-47	Sequence 47, Appl
39	40	47.1	2339	2	US-08-223-305C-47	Sequence 47, Appl
40	40	47.1	2339	4	US-09-268-163-6	Sequence 6, Appl
41	40	47.1	2343	4	US-09-268-163-4	Sequence 4, Appl
42	40	47.1	2509	2	US-08-149-097D-35	Sequence 35, Appl
43	39	45.9	90	4	US-09-621-976-5990	Sequence 5990, Ap
44	39	45.9	187	4	US-09-328-352-7281	Sequence 7281, Ap
45	39	45.9	384	4	US-09-491-577-16	Sequence 16, Appl

## ALIGNMENTS

RESULT 1  
US-08-928-615-2  
; Sequence 2, Application US/08928615  
; Patent No. 5965535  
; GENERAL INFORMATION:  
; APPLICANT: Chauv, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED  
; TITLE OF INVENTION: BY HLA CLASS II MOLECULES  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Wolf, Greenfield & Sacks, P.C.  
; STREET: 600 Atlantic Avenue  
; CITY: Boston  
; STATE: MA  
; COUNTRY: U.S.A.  
; ZIP: 02210-2211  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FastSeq for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/928,615  
; FILING DATE:  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Van Amsterdam, John R.  
; REGISTRATION NUMBER: 40,212  
; REFERENCE/DOCKET NUMBER: L0461/7017  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-720-3500  
; TELEFAX: 617-720-2441  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 314 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-928-615-2

Query Match 100.0%; Score 85; DB 2; Length 314;  
Best Local Similarity 100.0%; Pred. No. 1.1e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GNMQYFFPVIFSKAS 15  
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Db 141 GNWQYFFPVIFSKAS 155

RESULT 2

US-09-166-448-2  
; Sequence 2, Application US/09166448  
; Patent No. 6291430

GENERAL INFORMATION:

; APPLICANT: Chauv, Pascal  
; APPLICANT: Vantomme, Valrie  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; APPLICANT: Thielemans, Kris  
; APPLICANT: Cortals, Jurgan  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7052  
; CURRENT APPLICATION NUMBER: US/09/166,448  
; CURRENT FILING DATE: 1998-10-05  
; NUMBER OF SEQ ID NOS: 81  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-166-448-2

Query Match 100.0%; Score 85; DB 3; Length 314;  
Best Local Similarity 100.0%; Pred. No. 1.1e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GNWQYFFPVIFSKAS 15  
DB 141 GNWQYFFPVIFSKAS 155

RESULT 3

US-09-348-933-2  
; Sequence 2, Application US/09348933  
; Patent No. 6359211

GENERAL INFORMATION:

; APPLICANT: Chauv, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7065  
; CURRENT APPLICATION NUMBER: US/09/348,933  
; CURRENT FILING DATE: 1999-07-07  
; EARLIER APPLICATION NUMBER: US 08/928,615  
; EARLIER FILING DATE: 1997-09-12  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-348-933-2

Query Match 100.0%; Score 85; DB 4; Length 314;  
Best Local Similarity 100.0%; Pred. No. 1.1e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GNWQYFFPVIFSKAS 15  
DB 141 GNWQYFFPVIFSKAS 155

RESULT 4

US-09-697-884-2  
; Sequence 2, Application US/09697884  
; Patent No. 6426217

GENERAL INFORMATION:

; APPLICANT: Chauv, Pascal

; APPLICANT: Chauv, Pascal  
; APPLICANT: Vantomme, Valrie  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon-Falleur, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; APPLICANT: Thielemans, Kris  
; APPLICANT: Cortals, Jurgan  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
; FILE REFERENCE: L0461/7052  
; CURRENT APPLICATION NUMBER: US/09/697,884  
; CURRENT FILING DATE: 2000-10-27  
; PRIOR APPLICATION NUMBER: 09/166,448  
; PRIOR FILING DATE: 1998-10-05  
; NUMBER OF SEQ ID NOS: 81  
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; ORGANISM: Homo sapiens  
US-09-697-884-2

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Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GNWQYFFPVIFSKAS 15  
DB 141 GNWQYFFPVIFSKAS 155

RESULT 5

US-09-392-714-30  
; Sequence 30, Application US/093927144  
; Patent No. 6886147

GENERAL INFORMATION:

; APPLICANT: Scanlan, Matthew J.  
; APPLICANT: Gure, Ali O.  
; APPLICANT: Williamson, Barbara  
; APPLICANT: Chen, Yao-Tseng  
; APPLICANT: Old, Lloyd J.  
; TITLE OF INVENTION: Cancer Associated Antigens and Uses  
; TITLE OF INVENTION: Therefor  
; FILE REFERENCE: L0461/7062  
; CURRENT APPLICATION NUMBER: US/09/392,7144  
; CURRENT FILING DATE: 1999-09-09  
; EARLIER APPLICATION NUMBER: PCT/US98/14679  
; EARLIER FILING DATE: 1998-07-15  
; NUMBER OF SEQ ID NOS: 30  
; SOFTWARE: FastSeq for Windows Version 3.0  
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; LENGTH: 314  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-392-714-30

Query Match 100.0%; Score 85; DB 4; Length 314;  
Best Local Similarity 100.0%; Pred. No. 1.1e-06;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GNWQYFFPVIFSKAS 15  
DB 141 GNWQYFFPVIFSKAS 155

RESULT 6

US-08-159-339A-1215  
; Sequence 1215, Application US/08159339A  
; Patent No. 6037135

GENERAL INFORMATION:

; APPLICANT: Kubo, Ralph T.  
; APPLICANT: Grey, Howard M.  
; APPLICANT: Sette, Alessandro  
; APPLICANT: Celis, Esteban

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: August 17, 2004, 17:19:33 ; Search time 11.7778 Seconds  
(without alignments)  
65.750 Million cell updates/sec

Title: US-09-914-239-2

Perfect score: 74

Sequence: 1 RKVAELVHFLLLKYR 15

Scoring table: BLOSUM62

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Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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- Issued Patents AA.\*  
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

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11	64	86.5	14	4	US-08-928-615-3
12	64	86.5	14	5	US-08-928-615-3
13	64	86.5	14	6	US-08-928-615-3
14	64	86.5	14	7	US-08-928-615-3
15	64	86.5	14	8	US-08-928-615-3
16	60	81.1	13	3	US-08-928-615-3
17	60	81.1	13	4	US-08-928-615-3
18	60	81.1	13	5	US-08-928-615-3
19	60	81.1	13	6	US-08-928-615-3
20	60	81.1	13	7	US-08-928-615-3
21	60	81.1	13	8	US-08-928-615-3
22	58	78.4	309	1	US-08-928-615-3
23	58	78.4	309	2	US-08-928-615-3
24	58	78.4	309	3	US-08-928-615-3
25	58	78.4	309	4	US-08-928-615-3
26	58	78.4	309	5	US-08-928-615-3
27	58	78.4	309	6	US-08-928-615-3

28	58	78.4	309	4	US-09-392-714-29	Sequence 29, Appl
29	57	77.0	346	4	US-09-468-433C-22	Sequence 22, Appl
30	56	75.7	12	2	US-08-928-615-9	Sequence 9, Appl
31	56	75.7	12	3	US-09-166-448-9	Sequence 9, Appl
32	56	75.7	12	4	US-09-348-933-9	Sequence 9, Appl
33	56	75.7	12	4	US-09-697-884-9	Sequence 9, Appl
34	56	75.7	13	3	US-09-166-448-31	Sequence 31, Appl
35	56	75.7	13	4	US-09-697-884-31	Sequence 31, Appl
36	56	75.7	14	3	US-09-166-448-30	Sequence 30, Appl
37	56	75.7	14	4	US-09-697-884-30	Sequence 30, Appl
38	56	75.7	16	2	US-08-928-615-4	Sequence 4, Appl
39	56	75.7	16	3	US-09-166-448-4	Sequence 4, Appl
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41	56	75.7	16	4	US-09-697-884-4	Sequence 4, Appl
42	56	75.7	373	4	US-09-066-251B-19	Sequence 19, Appl
43	56	75.7	373	4	US-09-468-433C-19	Sequence 19, Appl
44	51	68.9	10	3	US-08-159-339A-1206	Sequence 1206, Ap
45	51	68.9	10	3	US-09-166-448-41	Sequence 41, Appl

## ALIGNMENTS

RESULT 1  
US-08-928-615-3  
; Sequence 3, Application US/08928615  
; Patent No. 5965535  
; GENERAL INFORMATION:  
; APPLICANT: Chaux, Pascal  
; APPLICANT: Stroobant, Vincent  
; APPLICANT: Boon, Thierry  
; APPLICANT: van der Bruggen, Pierre  
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED  
; TITLE OF INVENTION: BY HLA CLASS II MOLECULES  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSER: Wolf, Greenfield & Sacks, P.C.  
; STREET: 600 Atlantic Avenue  
; CITY: Boston  
; STATE: MA  
; COUNTRY: U.S.A.  
; ZIP: 02210-2211  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FASTSEQ for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/928,615  
; FILING DATE:  
; CLASSIFICATION: 424  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Van Amsterdam, John R.  
; REGISTRATION NUMBER: 40,212  
; REFERENCE/POCKET NUMBER: L0461/7017  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-720-3500  
; TELEFAX: 617-720-2441  
; INFORMATION FOR SEQ ID NO: 3:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 16 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-928-615-3

Query Match 100.0%; Score 74; DB 2; Length 16;  
Best Local Similarity 100.0%; Pred. No. 4.9e-07;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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Db      1 RKVAELVHFLLLKYR 15

RESULT 2
US-09-166-448-3
; Sequence 3, Application US/09166448
; Patent No. 6291430
; GENERAL INFORMATION:
; APPLICANT: Chauv, Pascal
; APPLICANT: Vantomme, Valrie
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon-Falleur, Thierry
; APPLICANT: van der Bruggen, Pierre
; APPLICANT: Thielemans, Kris
; APPLICANT: Cortbals, Jurgen
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; FILE REFERENCE: L0461/7052
; CURRENT APPLICATION NUMBER: US/09/166,448
; CURRENT FILING DATE: 1998-10-05
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-166-448-3

Query Match      100.0%; Score 74; DB 3; Length 16;
Best Local Similarity 100.0%; Pred. No. 4.9e-07;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 3
US-09-348-933-3
; Sequence 3, Application US/09348933
; Patent No. 6369211
; GENERAL INFORMATION:
; APPLICANT: Chauv, Pascal
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon-Falleur, Thierry
; APPLICANT: van der Bruggen, Pierre
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; FILE REFERENCE: L0461/7065
; CURRENT APPLICATION NUMBER: US/09/348,933
; CURRENT FILING DATE: 1999-07-07
; EARLIER APPLICATION NUMBER: US 08/928,615
; EARLIER FILING DATE: 1997-09-12
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-348-933-3

Query Match      100.0%; Score 74; DB 4; Length 16;
Best Local Similarity 100.0%; Pred. No. 4.9e-07;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RKVAELVHFLLLKYR 15
Db      1 RKVAELVHFLLLKYR 15

RESULT 4
US-09-697-884-3
; Sequence 3, Application US/09697884
; Patent No. 6426217
; GENERAL INFORMATION:
; APPLICANT: Chauv, Pascal
; APPLICANT: Vantomme, Valrie
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon-Falleur, Thierry
; APPLICANT: van der Bruggen, Pierre
; APPLICANT: Thielemans, Kris
; APPLICANT: Cortbals, Jurgen
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; FILE REFERENCE: L0461/7052
; CURRENT APPLICATION NUMBER: US/09/697,884
; CURRENT FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: 09/166,448
; PRIOR FILING DATE: 1998-10-05
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-697-884-3

Query Match      100.0%; Score 74; DB 4; Length 16;
Best Local Similarity 100.0%; Pred. No. 4.9e-07;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 RKVAELVHFLLLKYR 15
Db      1 RKVAELVHFLLLKYR 15

RESULT 5
US-08-928-615-2
; Sequence 2, Application US/08928615
; Patent No. 5965535
; GENERAL INFORMATION:
; APPLICANT: Chauv, Pascal
; APPLICANT: Stroobant, Vincent
; APPLICANT: Boon, Thierry
; APPLICANT: van der Bruggen, Pierre
; TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Wolf, Greenfield & Sacks, P.C.
; STREET: 600 Atlantic Avenue
; CITY: Boston
; STATE: MA
; COUNTRY: U.S.A.
; ZIP: 02210-2211
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/928,615
; FILING DATE:
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Van Amsterdam, John R.
; REGISTRATION NUMBER: 40,212
; REFERENCE/DOCKET NUMBER: L0461/7017
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-720-3500
; TELEFAX: 617-720-2441
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 314 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-928-615-2
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